

This document gives pertinent information concerning the reissuance of the VPDES Permit listed below. This permit is being processed as a minor, industrial permit. The discharge results from a foundation drain/groundwater treatment system for an underground parking garage. The effluent limitations and special conditions contained in this permit will maintain the Water Quality Standards of 9 VAC 25-260-00 et seq.

1.	Facility Name and Mailing Address:	John Marshall III Site 8251 Greensboro Drive, B100 McLean, VA 22102	SIC Code:	6512
	Facility Location:	8283-C Greensboro Drive McLean, VA 22102	County:	Fairfax
	Facility Contact Name:	Tim Incheck	Telephone Number:	703-902-6666
2.	Permit Number:	VA0090093	Expiration Date:	7 July 2009
	Other VPDES Permits:	Not Applicable		
	Other Permits:	Not Applicable		
	E2/E3/E4 Status:	Not Applicable		
3.	Owner Name:	Marshall Property LLC		
	Owner Contact>Title:	Tim Incheck Senior Operations Manager	Telephone Number:	703-902-6666
4.	Application Complete Date:	13 January 2009		
	Permit Drafted By:	Douglas Frasier	Date Drafted:	3 February 2009 2 October 2009 28 October 2009
	Draft Permit Reviewed By:	Alison Thompson	Date Reviewed:	12 February 2009 29 October 2009 15 October 2009
		Bryant Thomas		
	Public Comment Period:	Start Date: 3 February 2010	End Date:	5 March 2010
5.	Receiving Waters Information:	See Attachment 1 for the Flow Frequency Determination.		
	Receiving Stream Name:	Old Courthouse Spring Branch		
	Drainage Area at Outfall:	0.37 square miles	River Mile:	2.12
	Stream Basin:	Potomac River	Subbasin:	Potomac River
	Section:	9	Stream Class:	III
	Special Standards:	None	Waterbody ID:	VAN-A11R
	7Q10 Low Flow:	0.0 MGD	7Q10 High Flow:	0.0 MGD
	1Q10 Low Flow:	0.0 MGD	1Q10 High Flow:	0.0 MGD
	Harmonic Mean Flow:	0.0 MGD	30Q5 Flow:	0.0 MGD
	303(d) Listed:	No	30Q10 Flow:	0.0 MGD
	TMDL Approved:	Yes – downstream	Date TMDL Approved:	Difficult Run: Benthic – 7 November 2008 Bacteria – 7 November 2008

6. Statutory or Regulatory Basis for Special Conditions and Effluent Limitations:

- | | | | |
|-------------------------------------|-------------------------|-------------------------------------|-------------------------|
| <input checked="" type="checkbox"/> | State Water Control Law | <input type="checkbox"/> | EPA Guidelines |
| <input checked="" type="checkbox"/> | Clean Water Act | <input checked="" type="checkbox"/> | Water Quality Standards |
| <input checked="" type="checkbox"/> | VPDES Permit Regulation | <input type="checkbox"/> | Other |
| <input checked="" type="checkbox"/> | EPA NPDES Regulation | | |

7. Licensed Operator Requirements: Not Applicable

8. Reliability Class: Not Applicable

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9. Permit Characterization:

<input checked="" type="checkbox"/> Private	<input checked="" type="checkbox"/> Effluent Limited	Possible Interstate Effect
<input type="checkbox"/> Federal	<input checked="" type="checkbox"/> Water Quality Limited	Compliance Schedule Required
<input type="checkbox"/> State	<input type="checkbox"/> Toxics Monitoring Program Required	Interim Limits in Permit
<input type="checkbox"/> POTW	<input type="checkbox"/> Pretreatment Program Required	Interim Limits in Other Document
<input type="checkbox"/> TMDL		

10. Wastewater Sources and Treatment Description:

The John Marshall III Site is located at Tysons Corner in McLean, Virginia. This intermittent discharge results via an air-stripper treating contaminated groundwater; removing trace levels of volatile organic compounds from a foundation drain of a 9-story office building.

Background

Prior to construction, groundwater samples collected from monitoring wells at the John Marshall III Site in July and August 1998 were found to contain low levels of volatile organic compounds (VOCs). The source of these VOCs were thought to originate from contaminated soils on the Fletcher Estate; an adjacent property south of the John Marshall III Site. Historic operation of a transmission and auto repair service station on this site may have contaminated the soils and eventually the groundwater with industrial solvents. Subsurface investigations indicated that the groundwater flows in a parallel direction to the property line between the John Marshall III Site and the Fletcher Estate.

In order to mitigate some of the impact, the John Marshall III Site installed a retaining wall of steel panels, deep into the ground around the perimeter and along the property line between the two parcels, to prevent further migration from the Fletcher Estate.

The heirs of the Fletcher Estate entered into the Voluntary Remediation Program (VRP). This project was considered complete on 25 September 2002 with restrictions in place on groundwater use.

The John Marshall III Site initially discharged to the Fairfax County sanitary sewer, but began discharging to the County storm sewer system once the VPDES permit was issued in 1999 and permission was obtained to discharge to the storm sewer. The storm sewer terminates and discharges to Old Courthouse Spring Branch, a tributary to Wolftrap Creek which drains to Difficult Run. Difficult Run discharges into the Potomac River.

Present

Groundwater remediation at the John Marshall III Site consists of an air stripper which has been in operation since the start of construction. The air stripper is designed to remove a minimum of 90% of VOCs found in the groundwater. The system consists of 4 trays and has a design capacity of 12 gallons per minute, on average, and up to a maximum of 25 gallons per minute.

The discharge is intermittent and is dictated by the level of the groundwater. The effluent discharges to the Fairfax County storm sewer via a manhole which has been designated as Outfall 001.

Proposed

The permittee submitted monthly influent data from June 2007 to May 2009 as additional information for this permit reissuance. Data indicates that all monitored pollutants, excluding Trichloroethylene (TCE), were found below quantification levels (see **Attachment 2**). Except for one sampling event, TCE concentrations were typically found below the current Water Quality Criteria of 810 µg/L for surface waters. The permittee has stated that the system may conceivably be taken off-line based on the above influent data and continued operational costs .

See **Attachment 3** for the NPDES Permit Rating Worksheet.

See **Attachment 4** for a facility schematic/diagram.

TABLE 1 OUTFALL DESCRIPTION				
Outfall Number	Discharge Sources	Treatment	Max Design Flow	Outfall Latitude and Longitude
001	Groundwater treatment system	See Item 10 above.	0.1224 MGD	38° 55' 17" N 77° 14' 18" W
See Attachment 5 for topographic map.				

11. Sludge Treatment and Disposal Methods: Sewage sludge is not generated at this facility.

12. Discharges Located Within Waterbody VAN-A11R:

TABLE 2 DISCHARGES, INTAKES & MONITORING STATION LOCATIONS			
Permit Number	Facility Name	Type	Receiving Stream
VA0024121	The Maderia School	Municipal	Difficult Run, UT
VA0091995	Reston Lake Anne Air Conditioning Corp	Cooling Water	Lake Anne
VAG250087	U.S. Central Intelligence Agency		Potomac River, UT
VAG250102	The Peterson Companies		Scotts Run, UT
VAG830194	Texaco – Vienna Food Mart	Remediation	Piney Branch
VAG830246	Vienna 226 Maple Venture, LLC		Piney Branch
VAG830355	Exxon 26140		Captain Hickory Run, UT
VAG830350	MWAA – Former Merchants Tire Center		Old Courthouse Spring Branch

13. Material Storage: There are no chemicals used or stored at this facility.

14. Site Inspection: Performed by NRO staff on 23 October 2008 (see **Attachment 6**).

15. Receiving Stream Water Quality and Water Quality Standards:

a. Ambient Water Quality Data

There is no monitoring data available for this receiving stream. The nearest downstream DEQ ambient monitoring station is 1aWOT000.92, located on Wolftrap Creek at the Route 702 bridge crossing; approximately 3.8 river miles downstream.

There are several downstream impairments. Wolftrap Creek is listed as impaired for *E. coli* bacteria. A TMDL is scheduled for this impairment in 2020. Difficult Run is listed as impaired for Benthic (Sediment) and *E. coli* bacteria; TMDLs have been developed and both were approved by EPA on 7 November 2008. All upstream facilities were considered; but this facility was not included since it does not discharge the pollutants of concern. A TMDL concerning the Fish Consumption impairment due to Polychlorinated biphenyls (PCBs) is due in 2018.

b. Receiving Stream Water Quality Criteria

Part IX of 9 VAC 25-260(360-550) designates classes and special standards applicable to defined Virginia river basins and sections. The receiving stream Old Courthouse Spring Creek is located within Section 9 of the Potomac River Basin and classified as Class III water.

At all times, Class III waters must achieve dissolved oxygen (D.O.) of 4.0 mg/L or greater, a daily average D.O. of 5.0 mg/L or greater, a temperature that does not exceed 32° C and maintain a pH of 6.0 – 9.0 standard units (S.U.).

The 7Q10 and 1Q10 critical flows of the receiving stream have been determined to be 0.0 MGD. In cases such as this, effluent pH and temperature data may be used to establish the water quality criteria. Staff utilized the temperature values provided in the permit application, the 90th percentile of the effluent pH data from Discharge Monitoring Reports and a default value of 50 mg/L CaCO₃ for hardness to calculate the water quality criteria.

Attachment 7 details other water quality criteria applicable to the receiving stream.

c. Receiving Stream Special Standards

The State Water Control Board's Water Quality Standards, River Basin Section Tables (9 VAC 25-260-360, 370 and 380) designates the river basins, sections, classes and special standards for surface waters of the Commonwealth of Virginia. The receiving stream, Old Courthouse Spring Creek, is located within Section 9 of the Potomac River Basin. This section has not been designated with a special standard.

d. Threatened or Endangered Species

The Virginia DGIF Fish and Wildlife Information System Database was searched for records to determine if there are threatened or endangered species in the vicinity of the discharge. Threatened and endangered species were identified within a 2 mile radius of the discharge. The limits proposed in this draft permit are protective of the Virginia Water Quality Standards and therefore protect the threatened and endangered species found near the discharge.

16. Antidegradation (9 VAC 25-260-30):

All state surface waters are provided one of three levels of antidegradation protection. For Tier 1 or existing use protection, existing uses of the water body and the water quality to protect these uses must be maintained. Tier 2 water bodies have water quality that is better than the water quality standards. Significant lowering of the water quality of Tier 2 waters is not allowed without an evaluation of the economic and social impacts. Tier 3 water bodies are exceptional waters and are so designated by regulatory amendment. The antidegradation policy prohibits new or expanded discharges into exceptional waters.

The receiving stream has been classified as Tier 1 based on an evaluation of the critical flow values for 7Q10 and 1Q10. Permit limits proposed have been established which will result in attaining and/or maintaining all water quality criteria which apply to the receiving stream, including narrative criteria. These limitations will provide for the protection and maintenance of all existing uses.

17. Effluent Screening, Wasteload Allocation and Effluent Limitation Development:

To determine water quality-based effluent limitations for a discharge, the suitability of data must first be determined. Data is suitable for analysis if one or more representative data points are equal to or above the quantification level ("QL") and the data represent the exact pollutant being evaluated.

Next, the appropriate Water Quality Standards (WQS) are determined for the pollutants in the effluent. Then, the Wasteload Allocations (WLAs) are calculated. In this case, since the critical flows 7Q10 and 1Q10 have been determined to be zero, the WLAs are equal to the WQS. The WLA values are then compared with available effluent data to determine the need for effluent limitations. Effluent limitations are needed if the 97th percentile of the daily effluent concentration values is greater than the acute wasteload allocation or if the 97th percentile of the four-day average effluent concentration values is greater than the chronic wasteload allocation. Effluent limitations are based on the most limiting WLA, the required sampling frequency and statistical characteristics of the effluent data.

a. Effluent Screening

Effluent data, obtained from the 2004 – 2008 Discharge Monitoring Reports (DMRs), has been reviewed and determined to be suitable for evaluation. Please see **Attachment 8** for a summary of effluent data.

b. Effluent Limitations and Monitoring, Outfall 001 – Toxic Pollutants

The VPDES Permit Regulation at 9 VAC 25-31-230.D. requires that monthly and weekly average limitations be imposed for continuous discharges from POTWs and monthly average and daily maximum limitations be imposed for all other continuous non-POTW discharges.

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The 2004 reissuance stated that Virginia does not have aquatic toxicity criteria for Trichloroethylene (TCE); this parameter had the highest concentration among the volatile hydrocarbons during monitoring. Staff utilized the EPA AQUIRE (Aquatic Toxicity Information Retrieval) database in order to determine if limitations were warranted. It was ascertained that given the influent concentrations and subsequent treatment, no limitations were needed and the permittee would monitor for TCE and its degradation byproducts.

On 4 December 2007, the State Water Control Board adopted amendments to the General VPDES Permit Regulation for Discharges from Petroleum Contaminated Sites, Groundwater Remediation and Hydrostatic Tests, 9 VAC 25-120. This adopted regulation includes wastewaters from sites contaminated by chlorinated hydrocarbon solvents. Limitations set forth were based upon both the pollutant toxicity and the best available technology. This General Permit became effective on 26 February 2008.

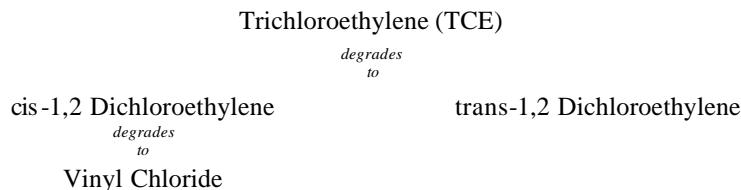
Generally, permitting staff will propose limitations that are found in other regulations for facilities that are similar in regards to treatment, type of pollutants and/or receiving waters. In this case, the facility would be required to meet stringent limitations based on the treatment installed.

However; as stated earlier, the permittee (1) submitted influent data indicating that all constituents, excluding Trichloroethylene (TCE), were found below detectable levels and (2) is considering removing the current treatment system based on this information. To further substantiate that treatment may not be warranted and that the Water Quality Criteria for TCE would not be violated; the permittee demonstrated that attenuation (volatilization) of untreated effluent occurs in the storm sewer conveyance system prior to entering the receiving stream. See **Attachment 9**. These results indicate that volatilization does occur and at conceivable rates, significantly reducing the pollutant levels prior to the receiving stream.

After thorough review and consideration of the influent data, demonstration study and the possible removal of treatment, it is staff's best professional judgement that a reasonable potential still exists to exceed the surface water criteria for TCE. Therefore, effluent limitations equal to the Water Quality Criteria for each respective pollutant are proposed with this reissuance. The 2004 reissuance stated no limitations were warranted based on the level of treatment. If treatment is removed, limitations are then necessary in order to protect the water quality of the receiving stream.

It should be noted that the Water Quality Standards triennial review was completed and approved by EPA during the drafting of this permit. The proposed limits are the most stringent for this type of facility. Please refer to the Water Quality Criteria in **Attachment 7** which reflects the approved triennial review.

Staff reviewed the monitoring requirements for the current permit. It is staff's best professional judgement that parameters more indicative of TCE degradation are warranted with this reissuance. Chlorinated hydrocarbons degrade via loss of chlorine ions under anaerobic conditions. Those degradation products are illustrated below:



Based on the above information, it is staff's best professional judgement that the facility monitor for those parameters which are more representative of the pollutant of concern. For those parameters which do not have a surface water criterion, it is proposed that monitoring only be required.

Since the facility did not have limits in place during the last permit term and the monitoring requirements were based on previous data submissions and best professional judgement, antibacksliding provisions are not applicable.

Furthermore, the permittee will be required to resample the discharge if any effluent limitation is exceeded. If the original results are confirmed, the permittee shall submit a corrective action plan and the sampling frequency shall revert to once per month (1/M). See Section 21.e.

c. Effluent Limitations and Monitoring, Outfall 001 – Conventional and Non-Conventional Pollutants

No changes to the pH limitations are proposed.

pH limitations are set at the Water Quality Criteria.

d. Effluent Limitations and Monitoring Summary

The effluent limitations and monitoring are presented in the following table. Limitations or monitoring were established for pH, Vinyl Chloride, cis-1,2 Dichloroethylene, trans-1,2 Dichloroethylene and Trichloroethylene.

18. Antibacksliding:

All limits in this permit are at least as stringent as those previously established. Backsliding does not apply to this reissuance.

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Design flow is 0.1224 MGD.

Effective Dates: During the period beginning with the permit's effective date and lasting until the expiration date.

PARAMETER	BASIS FOR LIMITS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
		Monthly Average	Weekly Average	Minimum	Maximum	Frequency*	Sample Type
Flow (MGD)	N/A	NL	N/A	N/A	NL	1/Q	Estimate
pH	3	N/A	N/A	6.0 S.U.	9.0 S.U.	1/Q	Grab
Vinyl Chloride	2,3	N/A	N/A	N/A	24 µg/L	1/Q	Grab
cis-1,2 Dichloroethylene	2,3	N/A	N/A	N/A	NL µg/L	1/Q	Grab
trans-1,2 Dichloroethylene	2,3	N/A	N/A	N/A	10,000 µg/L	1/Q	Grab
Trichloroethylene (TCE)	2,3	N/A	N/A	N/A	300 µg/L	1/Q	Grab

The basis for the limitations codes are:

1. Federal Effluent Requirements
2. Best Professional Judgement
3. Water Quality Standards (adopted 17 October 2008)

MGD = Million gallons per day.

1/Q = Once every calendar quarter.

N/A = Not applicable.

NL = No limit; monitor and report.

S.U. = Standard units.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

*The permittee shall submit quarterly sampling results for one year.

If all sampling results during the first year of this permit do not exceed the above limitations, the permittee may submit a written request to DEQ-NRO for a reduction in the sampling frequency to once every six (6) months (semi-annually). See Section 21.e.

The quarterly monitoring periods shall be January through March, April through June, July through September and October through December. The DMR shall be submitted no later than the 10th day of the month following the monitoring period.

The semi-annual monitoring periods shall be January through June and July through December.

The DMR shall be submitted no later than the 10th day of the month following the monitoring period.

20. Other Permit Requirements:

Part I.B. of the permit contains quantification levels and compliance reporting instructions.

9 VAC 25-31-190.L.4.c. requires an arithmetic mean for measurement averaging and 9 VAC 25-31-220.D. requires limits be imposed where a discharge has a reasonable potential to cause or contribute to an in-stream excursion of water quality criteria. Specific analytical methodologies for toxics are listed in this permit section as well as quantification levels (QLs) necessary to demonstrate compliance with applicable permit limitations or for use in future evaluations to determine if the pollutant has reasonable potential to cause or contribute to a violation. Required averaging methodologies are also specified.

21. Other Special Conditions:

- a. O&M Manual Requirement. Required by Code of Virginia §62.1-44.19; Sewage Collection and Treatment Regulations, 9 VAC 25-790; VPDES Permit Regulation, 9 VAC 25-31-190.E. On or before 8 June 2010, the permittee shall submit for approval an Operations and Maintenance (O&M) Manual or a statement confirming the accuracy and completeness of the current O&M Manual to the Department of Environmental Quality, Northern Regional Office (DEQ-NRO). Future changes to the facility must be addressed by the submittal of a revised O&M Manual within 90 days of the changes. Non-compliance with the O&M Manual shall be deemed a violation of the permit.
 - b. Water Quality Criteria Reopener. The VPDES Permit Regulation at 9 VAC 25-31-220.D. requires establishment of effluent limitations to ensure attainment/maintenance of receiving stream water quality criteria. Should effluent monitoring indicate the need for any water quality-based limitations, this permit may be modified or alternatively revoked and reissued to incorporate appropriate limitations.
 - c. Notification Levels. The permittee shall notify the Department as soon as they know or have reason to believe:
 - (1) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
 - (a) One hundred micrograms per liter;
 - (b) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony;
 - (c) Five times the maximum concentration value reported for that pollutant in the permit application; or
 - (d) The level established by the Board.
 - (2) That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
 - (a) Five hundred micrograms per liter;
 - (b) One milligram per liter for antimony;
 - (c) Ten times the maximum concentration value reported for that pollutant in the permit application; or
 - (d) The level established by the Board.
 - d. Materials Handling/Storage. 9 VAC 25-31-50 A prohibits the discharge of any wastes into State waters unless authorized by permit. Code of Virginia §62.1-44.16 and §62.1-44.17 authorize the Board to regulate the discharge of industrial waste or other waste.
 - e. Effluent Monitoring Frequency. The permittee, after one year of monitoring, may request a reduction in monitoring frequency to once every six (6) months, if all sampling results are below the limitations as stated in Section 19. If at any time sampling results exceed the limitation, the permittee shall resample within 15 days of receipt to confirm results. If the subsequent sample confirms the original results, the permittee shall submit for approval a corrective action plan and the sampling frequency shall revert back to once per month (1/M).
 - f. TMDL Reopener: This special condition is to allow the permit to be reopened if necessary to bring it into compliance with any applicable TMDL that may be developed and approved for the receiving stream.
22. Permit Section Part II. Part II of the permit contains standard conditions that appear in all VPDES Permits. In general, these standard conditions address the responsibilities of the permittee, reporting requirements, testing procedures and records retention.

23. Changes to the Permit from the Previously Issued Permit:

a. Special Conditions:

- Effluent Monitoring Frequency reduction after one year has been proposed with this reissuance.

b. Monitoring and Effluent Limitations:

- Methylene Chloride, Chloroform and Tetrachloroethylene parameters have been replaced with cis-1,2 Dichloroethylene and trans-1,2 Dichloroethylene which are more indicative of degradation products of TCE.
- Reduction in monitoring frequency from once per quarter (1/3M) to twice per year (1/6M) may be requested by the permittee if all effluent limitations are not exceeded during the first year of this permit.
- Effluent limitations equal to the Water Quality Criteria, adopted on 17 October 2008, for surface waters are proposed with this reissuance.

c. Other:

- The SIC Code was changed from 1542 to 6512 to reflect the current operations at this site. Construction has ceased and now activity concentrates on the daily operations and maintenance of the office building.
- A transfer of ownership was completed concurrently with this reissuance.

24. Variances/Alternate Limits or Conditions: Not Applicable**25. Public Notice Information:**

First Public Notice Date: 2 February 2010 Second Public Notice Date: 9 February 2010

Public Notice Information is required by 9 VAC 25-31-280.B. All pertinent information is on file and may be inspected and copied by contacting the: DEQ Northern Regional Office; 13901 Crown Court; Woodbridge, VA 22193; Telephone No. (703) 583-3873; Douglas.Frasier@deq.virginia.gov. See **Attachment 9** for a copy of the public notice document.

Persons may comment in writing or by email to the DEQ on the proposed permit action, and may request a public hearing, during the comment period. Comments shall include the name, address, and telephone number of the writer and of all persons represented by the commenter/requester, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The DEQ may decide to hold a public hearing, including another comment period, if public response is significant and there are substantial, disputed issues relevant to the permit. Requests for public hearings shall state 1) the reason why a hearing is requested; 2) a brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requester, including how and to what extent such interest would be directly and adversely affected by the permit; and 3) specific references, where possible, to terms and conditions of the permit with suggested revisions. Following the comment period, the Board will make a determination regarding the proposed permit action. This determination will become effective, unless the DEQ grants a public hearing. Due notice of any public hearing will be given. The public may request an electronic copy of the draft permit and fact sheet or review the draft permit and application at the DEQ Northern Regional Office by appointment.

26. 303 (d) Listed Stream Segments and Total Max. Daily Loads (TMDL):

There are several downstream impairments. TMDLs have been developed and approved for bacteria and benthic impairments. This facility was not given a wasteload allocation for either since it does not discharge the pollutant of concern. A TMDL addressing the downstream PCB impairment is scheduled for 2018.

27. Additional Comments:

Previous Board Action(s): Equity Office Management, LLC, former management agent for the owner, entered a Special Order by Consent on 28 September 2005. The basis of this Order was the failure to submit DMRs and other documentation as required by the permit in a timely manner. The Order was cancelled on 22 November 2006.

Staff Comments: This reissuance was delayed due to discussions regarding treatment levels, limitations and monitoring requirements. In addition, the permittee conducted extra monitoring during this time. Transfer of ownership was also completed during this reissuance.

Public Comment: The Northern Virginia Regional Commission submitted a comment on 8 March 2010 to advise DEQ that a jurisdiction-wide Chesapeake Bay Resource Management Area (RMA) has been established in Arlington, Fairfax Prince William, the City of Alexandria and the Town of Herndon. Copy of correspondence is included in the permit file.

EPA Checklist: The checklist can be found in **Attachment 10**.

Fact Sheet Attachments

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- Attachment 5 Topographic Map
- Attachment 6 Inspection Report
- Attachment 7 Water Quality Criteria
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- Attachment 10 Public Notice
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RECEIVED
OCT 30 1998

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER DIVISION
Water Quality Assessments and Planning
629 E. Main Street P.O. Box 10009 Richmond, Virginia 23240

NOV 10 1998 RECORDED
Dept. of Env. Quality

SUBJECT: Flow Frequency Determination
John Marshall III Site - #VA0090093

TO: Shih-Cheng Chang, NRO

FROM: Paul E. Herman, P.E., WQAP. *Paul*

DATE: October 28, 1998

COPIES: Ron Gregory, Charles Martin, File

The John Marshall III Site discharges to a storm sewer which drains to the Old Courthouse Spring Branch near Tysons Corner, VA. Flow frequencies are required at this site for use by the permit writer in developing effluent limitations for the VPDES permit.

The values at the discharge point were determined by inspection of the USGS Falls Church Quadrangle topographical map which shows the receiving stream as intermittent at the sewer line discharge point. The flow frequencies for intermittent streams are 0.0 cfs for the 1Q10, 7Q10, 30Q5, high flow 1Q10, high flow 7Q10, and the harmonic mean. The drainage area above the discharge point is 0.33 mi².

If you have any questions concerning this analysis, please let me know.

John Marshall III Site
8251 Greensboro Drive, B100
McLean, VA 22102
Permit Number: VA0090093

TABLE 1. SUMMARY OF AIR STRIPPER WATER QUALITY DATA

Target Analyte VDEQ SWQS	Sample Collection Date	Vinyl Chloride		Methylene Chloride		Chloroform		Trichloroethylene		Tetrachloroethylene	
		Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent
6/21/2007	4.2 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	300	3.2 J	5.0 U	5.0 U
7/24/2007	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	100	5.0 U	5.0 U	5.0 U	5.0 U
8/20/2007	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	86	5.0 U	5.0 U	5.0 U	5.0 U
9/18/2007	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	51	9.7	5.0 U	5.0 U	5.0 U
10/16/2007	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	28	6.7	5.0 U	5.0 U	5.0 U
11/9/2007	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	87	5.0 U	5.0 U	5.0 U	5.0 U
12/13/2007	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	25	5.0 U	5.0 U	5.0 U	5.0 U
1/11/2008	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	76	5.0 U	5.0 U	5.0 U	5.0 U
2/14/2008	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	316	2.6 J	5.0 U	5.0 U	5.0 U
3/13/2008	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	432	254	5.0 U	5.0 U	5.0 U
4/14/2008	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	192	5.0 U	5.0 U	5.0 U	5.0 U
5/16/2008	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1190	5.0 U	5.0 U	5.0 U	5.0 U
6/20/2008	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	489	5.0 U	5.0 U	5.0 U	5.0 U
7/15/2008	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	280	5.0 U	5.0 U	5.0 U	5.0 U
8/19/2008	2.7 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	106	5.0 U	5.0 U	5.0 U	5.0 U
9/15/2008	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	142	5.0 U	5.0 U	5.0 U	5.0 U
10/23/2008	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	233	5.0 U	5.0 U	5.0 U	5.0 U
11/17/2008	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	157	5.0 U	5.0 U	5.0 U	5.0 U
12/15/2008	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	118	5.0 U	5.0 U	5.0 U	5.0 U
1/22/2009	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	159	2.1 J	5.0 U	5.0 U	5.0 U
2/11/2009	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	152	5.0 U	5.0 U	5.0 U	5.0 U
3/17/2009	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	45	5.0 U	5.0 U	5.0 U	5.0 U
4/16/2009	4.0 U	2.0 U	4.0 U	2.0 U	4.0 U	2.0 U	304	2.1	4.0 U	2.0 U	2.0 U
5/13/2009	5.0 U	2.0 U	2.1 J	2.0 U	5.0 U	2.0 U	788	6.6	5.0 U	2.0 U	2.0 U
5/26/2009	2.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	491	2.8 J	5.0 U	5.0 U	5.0 U
AVERAGE	3.45 J	4.8 U	2.1 U	4.8 U	5.0 U	4.8 U	254	15	5.0 U	4.8 U	

Units = $\mu\text{g/L}$

VADEQ SWQS = Virginia Department of Environmental Quality Surface Water Quality Standard.

U = the analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J = the analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

NPDES PERMIT RATING WORK SHEET

VPDES NO. : VA0090093

- | | |
|-------------------------------------|------------------------------------|
| <input checked="" type="checkbox"/> | Regular Addition |
| <input type="checkbox"/> | Discretionary Addition |
| <input type="checkbox"/> | Score change, but no status Change |
| <input type="checkbox"/> | Deletion |

Facility Name: John Marshall Site IIICity / County: FairfaxReceiving Water: Old Courthouse Spring Branch

Reach Number: _____

Is this facility a steam electric power plant (sic =4911) with one or more of the following characteristics?

1. Power output 500 MW or greater (not using a cooling pond/lake)
2. A nuclear power Plant
3. Cooling water discharge greater than 25% of the receiving stream's 7Q10 flow rater

Is this permit for a municipal separate storm sewer serving a population greater than 100,000?

- YES; score is 700 (stop here)
 NO; (continue)

Yes; score is 600 (stop here) NO; (continue)

FACTOR 1: Toxic Pollutant Potential

PCS SIC Code: _____ Primary Sic Code: 1542 Other Sic Codes: _____
 Industrial Subcategory Code: 000 (Code 000 if no subcategory)

Determine the Toxicity potential from Appendix A. Be sure to use the TOTAL toxicity potential column and check one)

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
<input checked="" type="checkbox"/> No process waste streams	0	0	<input type="checkbox"/> 3.	3	15	<input type="checkbox"/> 7.	7	35
<input type="checkbox"/> 1.	1	5	<input type="checkbox"/> 4.	4	20	<input type="checkbox"/> 8.	8	40
<input type="checkbox"/> 2.	2	10	<input type="checkbox"/> 5.	5	25	<input type="checkbox"/> 9.	9	45
			<input type="checkbox"/> 6.	6	30	<input type="checkbox"/> 10.	10	50

Code Number Checked: 0
Total Points Factor 1: 0

FACTOR 2: Flow/Stream Flow Volume (Complete either Section A or Section B; check only one)

Section A – Wastewater Flow Only considered

	Wastewater Type (see Instructions)	Code	Points
Type I:	Flow < 5 MGD	11	0
	Flow 5 to 10 MGD	12	10
	Flow > 10 to 50 MGD	13	20
	Flow > 50 MGD	14	30
Type II:	Flow < 1 MGD	21	10
	Flow 1 to 5 MGD	22	20
	Flow > 5 to 10 MGD	23	30
	Flow > 10 MGD	24	50
Type III:	Flow < 1 MGD	31	0
	Flow 1 to 5 MGD	32	10
	Flow > 5 to 10 MGD	33	20
	Flow > 10 MGD	34	30

Section B – Wastewater and Stream Flow Considered

	Wastewater Type (see Instructions)	Type I/III:	Percent of Instream Wastewater Concentration at Receiving Stream Low Flow	Code	Points
Type I/II:	< 10 %			41	0
	10 % to < 50 %			42	10
	> 50%			<input checked="" type="checkbox"/> 43	20
Type II:	< 10 %			51	0
	10 % to < 50 %			52	20
	> 50 %			53	30

Code Checked from Section A or B: 43
Total Points Factor 2: 20

NPDES PERMIT RATING WORK SHEET**FACTOR 3: Conventional Pollutants**

(only when limited by the permit)

A. Oxygen Demanding Pollutants: (check one) BOD COD Other: _____ VOCs _____

Permit Limits: (check one)

	Code	Points
<input checked="" type="checkbox"/>	1	0
<input type="checkbox"/>	2	5
<input type="checkbox"/>	3	15
<input type="checkbox"/>	4	20

Code Number Checked: 1
Points Scored: 0

B. Total Suspended Solids (TSS)

Permit Limits: (check one)

	Code	Points
<input type="checkbox"/>	1	0
<input type="checkbox"/>	2	5
<input type="checkbox"/>	3	15
<input type="checkbox"/>	4	20

Code Number Checked: NA
Points Scored: 0C. Nitrogen Pollutants: (check one) Ammonia Other: _____

Permit Limits: (check one)

	Nitrogen Equivalent	Code	Points
<input type="checkbox"/>	< 300 lbs/day	1	0
<input type="checkbox"/>	300 to 1000 lbs/day	2	5
<input type="checkbox"/>	> 1000 to 3000 lbs/day	3	15
<input type="checkbox"/>	> 3000 lbs/day	4	20

Code Number Checked: NA
Points Scored: 0
Total Points Factor 3: 0**FACTOR 4: Public Health Impact**

Is there a public drinking water supply located within 50 miles downstream of the effluent discharge (this include any body of water to which the receiving water is a tributary)? A public drinking water supply may include infiltration galleries, or other methods of conveyance that ultimately get water from the above reference supply.

YES; (If yes, check toxicity potential number below)

NO; (If no, go to Factor 5)

Determine the *Human Health* potential from Appendix A. Use the same SIC code and subcategory reference as in Factor 1. (Be sure to use the *Human Health* toxicity group column – check one below)

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
<input checked="" type="checkbox"/> No process waste streams	0	0	<input type="checkbox"/>	3.	0	<input type="checkbox"/>	7.	15
<input type="checkbox"/> 1.	1	0	<input type="checkbox"/>	4.	0	<input type="checkbox"/>	8.	20
<input type="checkbox"/> 2.	2	0	<input type="checkbox"/>	5.	5	<input type="checkbox"/>	9.	25
			<input type="checkbox"/>	6.	10	<input type="checkbox"/>	10.	30

Code Number Checked: 0
Total Points Factor 4: 0

NPDES PERMIT RATING WORK SHEET**FACTOR 5: Water Quality Factors**

- A. Is (or will) one or more of the effluent discharge limits based on water quality factors of the receiving stream (rather than technology-base federal effluent guidelines, or technology-base state effluent guidelines), or has a wasteload allocation been to the discharge

	Code	Points
<input type="checkbox"/> YES	1	10
<input checked="" type="checkbox"/> NO	2	0

- B. Is the receiving water in compliance with applicable water quality standards for pollutants that are water quality limited in the permit?

	Code	Points
<input checked="" type="checkbox"/> YES	1	0
<input type="checkbox"/> NO	2	5

- C. Does the effluent discharged from this facility exhibit the reasonable potential to violate water quality standards due to whole effluent toxicity?

	Code	Points
<input type="checkbox"/> YES	1	10
<input checked="" type="checkbox"/> NO	2	0

Code Number Checked: A 2 B 1 C 2
Points Factor 5: A 0 + B 0 + C 0 = 0

FACTOR 6: Proximity to Near Coastal Waters

- A. Base Score: Enter flow code here (from factor 2) 43

Check appropriate facility HPRI code (from PCS):			Enter the multiplication factor that corresponds to the flow code:	
HPRI#	Code	HPRI Score	Flow Code	Multiplication Factor
<input type="checkbox"/>	1	20	11, 31, or 41	0.00
<input type="checkbox"/>	2	0	12, 32, or 42	0.05
<input checked="" type="checkbox"/>	3	30	13, 33, or 43	0.10
<input type="checkbox"/>	4	0	14 or 34	0.15
<input type="checkbox"/>	5	20	21 or 51 22 or 52 23 or 53 24	0.10 0.30 0.60 1.00

HPRI code checked : 3

Base Score (HPRI Score): 30 X (Multiplication Factor) 0.1 = 3

- B. Additional Points – NEP Program

For a facility that has an HPRI code of 3, does the facility discharge to one of the estuaries enrolled in the National Estuary Protection (NEP) program (see instructions) or the Chesapeake Bay?

Code	Points
<input checked="" type="checkbox"/> 1	10
<input type="checkbox"/> 2	0

- C. Additional Points – Great Lakes Area of Concern

For a facility that has an HPRI code of 5, does the facility discharge any of the pollutants of concern into one of the Great Lakes' 31 area's of concern (see instructions)?

Code	Points
<input type="checkbox"/>	1
<input checked="" type="checkbox"/> 2	0

Code Number Checked: A 3 B 1 C 2
Points Factor 6: A 3 + B 10 + C 0 = 13

NPDES PERMIT RATING WORK SHEET**SCORE SUMMARY**

<u>Factor</u>	<u>Description</u>	<u>Total Points</u>
1	Toxic Pollutant Potential	0
2	Flows / Streamflow Volume	20
3	Conventional Pollutants	0
4	Public Health Impacts	0
5	Water Quality Factors	0
6	Proximity to Near Coastal Waters	13
TOTAL (Factors 1 through 6)		33

S1. Is the total score equal to or greater than 80 YES; (Facility is a Major) NO

S2. If the answer to the above questions is no, would you like this facility to be discretionary major?

NO

YES; (Add 500 points to the above score and provide reason below:

Reason: _____

NEW SCORE : 33

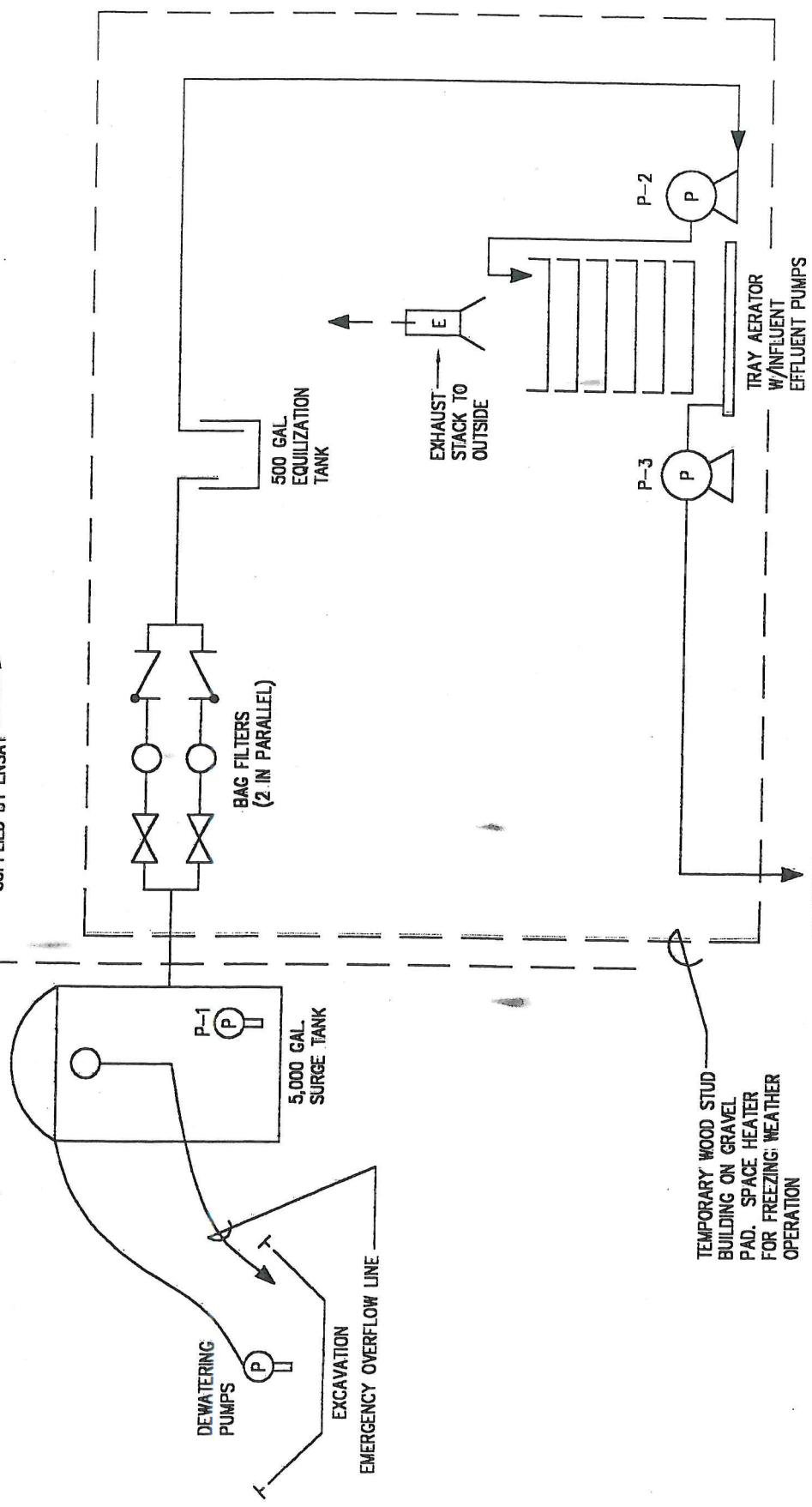
OLD SCORE : 33

Permit Reviewer's Name : Douglas Frasier

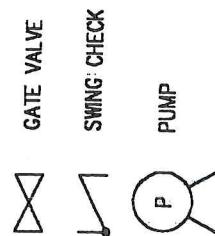
Phone Number: 703-583-3873

Date: 3 February 2009

— SUPPLIED BY OTHERS —
— SUPPLIED BY ENSAT —



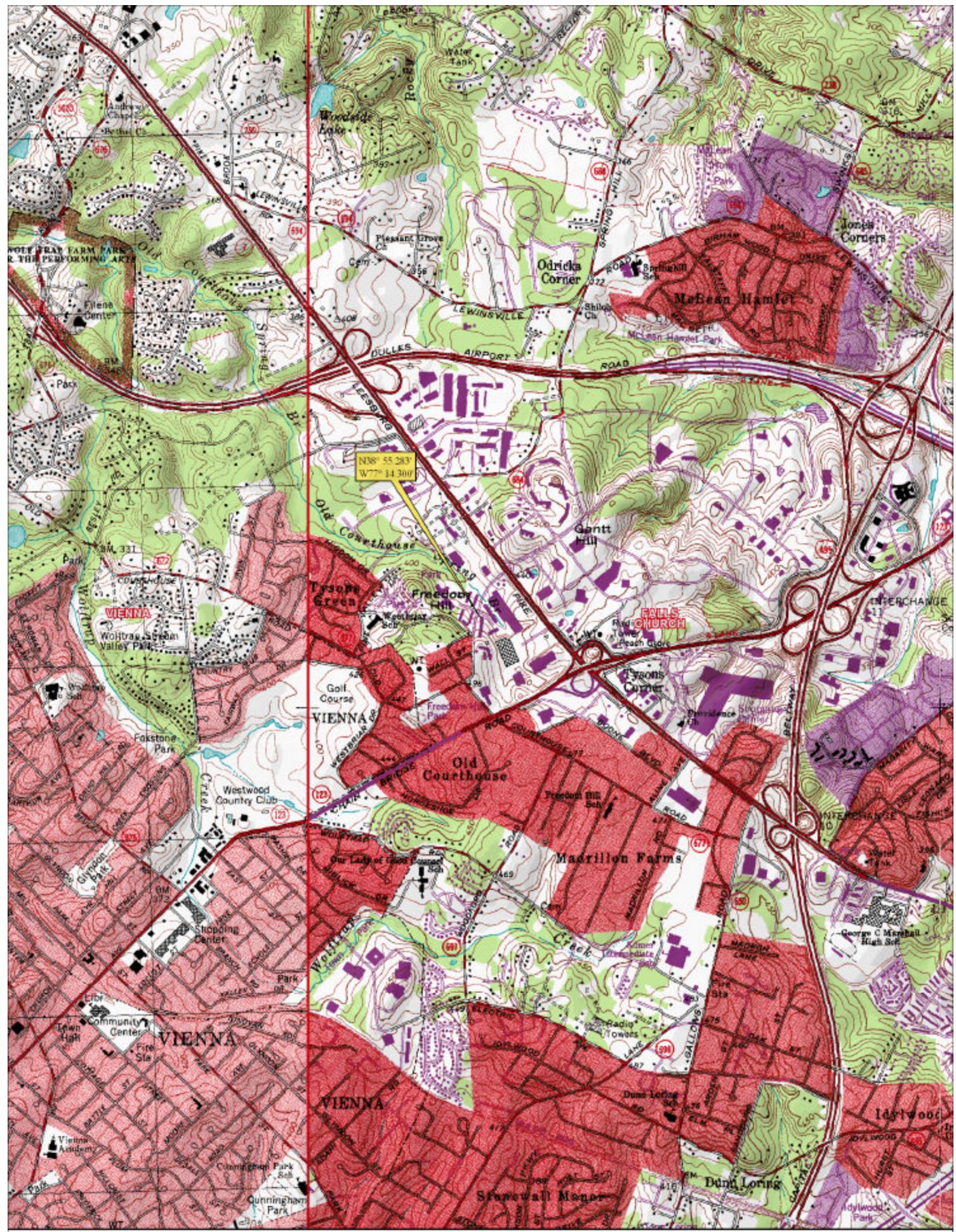
SYMBOLS



PUMP SCHEDULE

- P-1 - SUBMERSIBLE, NON-CLOG; END SUCTION: 1/2 H.P., 90 G.P.M. MAX. @ 33 FT.
- P-2 - SUPPLIED WITH AERATOR
- P-3 - SUPPLIED WITH AERATOR

ENVIRONMENTAL SERVICE AND TECHNOLOGY CORPORATION			
PROCESS SCHEMATIC			
CONSTRUCTION DEWATERING/TREATMENT			
DRAWN BY	P.L.S.	DATE	8-13-98
SCALE	N.T.S.	Job #	98X-1000
FILE NAME	98A1000.DWG		
PROJECT MANAGER	R.M.		



DELOME

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COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE

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Preston Bryant
Secretary of Natural Resources

David K. Paylor
Director

Thomas Fahy
Regional Director

October 29, 2008

Mr. Tim Incheck
Cassidy & Pinkard
8251 Greensboro Drive
Suite B100
McLean, VA 22102

Re: John Marshall III Site Technical Inspection – VA0090093

Dear Mr. Incheck:

Attached is a copy of the technical inspection report generated while conducting a Facility Technical Inspection at the John Marshall III site groundwater remediation system on October 23, 2008. The compliance staff would like to thank Mr. David Bookbinder for his time and assistance during the inspection.

Review of the Discharge Monitoring Reports shows minor problems with the sample analysis. These have been discussed with Mr. Bookbinder. No response is required to this report since future DMR submittals will address the sample analysis problems.

If you have any questions or comments concerning this report, please feel free to contact me at the Northern Regional Office at (703) 583-3833 or by E-mail at twnelson@deq.virginia.gov.

Sincerely,

Terry Nelson
Environmental Specialist II

cc: Permit/DMR File
 Compliance Manager
 Compliance Auditor
 Compliance Inspector
 Mr. David Bookbinder – ECS
 Steve Stell – OWCP – EPA COPY

DEQ
WASTEWATER FACILITY INSPECTION REPORT
PREFACE

VPDES/State Certification No.	(RE) Issuance Date	Amendment Date	Expiration Date
VA0090093	July 8, 2004		July 7, 2009
Facility Name	Address		Telephone Number
John Marshall III	8283-C Greensboro Drive McLean, VA		NA
Owner Name	Address		Telephone Number
Beacon Capital Partners, LLC	200 State St., 5th Fl. Boston, MA 02109		NA
Responsible Official	Address		Telephone Number
Mr. Tim Incheck Senior Operations Manager	Cassidy & Pinkard Colliers 8251 Greensboro Drive, Suite B100 McLean, VA 22102		703-902-6666
Responsible Operator	Operator Cert. Class/number		Telephone Number
David Bookbinder	NA		703-995-6540

TYPE OF FACILITY:

DOMESTIC				INDUSTRIAL			
Federal		Major		Major		Primary	
Non-federal		Minor		Minor	X	Secondary	

INFLUENT CHARACTERISTICS:			DESIGN:		
	Flow	Variable			
	Population Served	NA			
	Connections Served	NA			
	BOD ₅	NA			
	TSS	NA			

EFFLUENT LIMITS.

Parameter	Min.	Avg.	Max.	Parameter	Min.	Avg.	Max.
Flow (MGD)		NL	NL	TCE (ug/L)			NL
pH (S.U.)	6		9	Vinyl Chloride (ug/L)			NL
Methlyene Chloride (ug/L)			NL	Chloroform (ug/L)			NL
Tetrachloroethylene (ug/L)			NL				

	Receiving Stream	Old Courthouse Spring Branch	
	Basin	Potomac River	
	Discharge Point (LAT)	38° 55' 17" N	
	Discharge Point (LONG)	77° 14' 18" W	

Virginia Department of Environmental Quality
Northern Regional Office

FOCUSED CEI TECH/LAB INSPECTION REPORT

FACILITY NAME: John Marshall III		INSPECTION DATE:	October 23, 2008	
		INSPECTOR	Terry Nelson	
PERMIT No.: VA0090093		REPORT DATE:	October 24, 2008	
TYPE OF FACILITY:	<input type="checkbox"/> Municipal	<input type="checkbox"/> Major	TIME OF INSPECTION:	Arrival 1000
	<input checked="" type="checkbox"/> Industrial	<input checked="" type="checkbox"/> Minor		Departure 1030
	<input type="checkbox"/> Federal	<input type="checkbox"/> Small Minor	TOTAL TIME SPENT (including prep & travel)	
	<input type="checkbox"/> HP	<input type="checkbox"/> LP	6 hours	
PHOTOGRAPHS:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	UNANNOUNCED INSPECTION?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
REVIEWED BY / Date:				
Doug Frasier, VA DEQ				
PRESENT DURING INSPECTION: Tim Incheck, Cassidy & Pinkard Colliers				
David Bookbinder, ECS				

TECHNICAL INSPECTION

1. Has there been any new construction? Comments:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
• If so, were plans and specifications approved?	
2. Is the Operations and Maintenance Manual approved and up-to-date? Comments:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3. Are the Permit and/or Operation and Maintenance Manual specified licensed operator being met? Comments:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
4. Are the Permit and/or Operation and Maintenance Manual specified operator staffing requirements being met? Comments:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Is there an established and adequate program for training personnel? Comments:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
6. Are preventive maintenance task schedules being met? Comments:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7. Does the plant experience any organic or hydraulic overloading? Comments:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
8. Have there been any bypassing or overflows since the last inspection? Comments:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
9. Is the standby generator (including power transfer switch) operational and exercised regularly? Comments: Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No
10. Is the plant alarm system operational and tested regularly? Comments:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

TECHNICAL INSPECTION

11. Is sludge disposed of in accordance with the approved sludge management plan? <u>Comments: Not applicable</u>		<input type="checkbox"/> Yes <input type="checkbox"/> No
12. Is septage received? <ul style="list-style-type: none"> • If so, is septage loading controlled, and are appropriate records maintained? <u>Comments:</u>		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
13. Are all plant records (operational logs, equipment maintenance, industrial waste contributors, sampling and testing) available for review and are records adequate? <u>Comments:</u>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
14. Which of the following records does the plant maintain? <p style="margin-left: 20px;"><input checked="" type="checkbox"/> Operational logs <input checked="" type="checkbox"/> Instrument maintenance & calibration</p> <p style="margin-left: 20px;"><input type="checkbox"/> Mechanical equipment maintenance <input type="checkbox"/> Industrial Waste Contribution (Municipal facilities)</p> <u>Comments:</u>		
15. What does the operational log contain? <p style="margin-left: 20px;"><input checked="" type="checkbox"/> Visual observations <input checked="" type="checkbox"/> Flow Measurement <input type="checkbox"/> Laboratory results <input checked="" type="checkbox"/> Process adjustments</p> <p style="margin-left: 20px;"><input type="checkbox"/> Control calculations <input type="checkbox"/> Other (specify) <input type="text"/></p> <u>Comments:</u>		
16. What do the mechanical equipment records contain? <p style="margin-left: 20px;"><input type="checkbox"/> As built plans and specs <input type="checkbox"/> Manufacturers instructions <input type="checkbox"/> Lubrication schedules</p> <p style="margin-left: 20px;"><input type="checkbox"/> Spare parts inventory <input type="checkbox"/> Equipment/parts suppliers</p> <p style="margin-left: 20px;"><input type="checkbox"/> Other (specify) <input type="text"/></p> <u>Comments: The mechanical records and information is being handled by ENSAT who are based in Culpeper</u>		
17. What do the industrial waste contribution records contain (Municipal only)? <p style="margin-left: 20px;"><input type="checkbox"/> Waste characteristics <input type="checkbox"/> Impact on plant <input type="checkbox"/> Locations and discharge types</p> <p style="margin-left: 20px;"><input type="checkbox"/> Other (specify) <input type="text"/></p> <u>Comments:</u>		
18. Which of the following records are kept at the plant and available to personnel? <p style="margin-left: 20px;"><input type="checkbox"/> Equipment maintenance records <input checked="" type="checkbox"/> Operational log <input type="checkbox"/> Industrial contributor records</p> <p style="margin-left: 20px;"><input type="checkbox"/> Instrumentation records <input checked="" type="checkbox"/> Sampling and testing records</p> <u>Comments: Consultants maintain log book that they bring with them to the site.</u>		
19. List records not normally available to plant personnel and their location: <u>Comments:</u>		
20. Are the records maintained for the required time period (three or five years)? <u>Comments:</u>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

UNIT PROCESS EVALUATION SUMMARY SHEET

Background

VPDES Permit VA0090093 was re-issued to EOP Marshall LLC in 2004. In April 2007, Beacon Properties Corporation and Equity Office Properties merged to form Beacon Capital Partners. Cassidy & Pinkard Colliers are the current property managers. The permit authorizes the discharge of contaminated foundation drainage to the Fairfax County storm drain system after treatment to remove Volatile Organic Compounds (VOCs). The treatment consists of an air stripping tower. The average monthly flows are approximately 20 gallons per day (GPD). For the third quarter of 2008, the average flow was 16 GPD and a pH of 7.6 S.U. They monitor for 5 VOCs, Trichloroethylene (TCE), Vinyl Chloride, Methylene Chloride, Tetrachloroethylene, and Chloroform. For the third quarter of 2008, no VOC was above the detection level.

Plant Operation

The treatment system is being maintained by ENSAT while Environmental Consultant Services (ECS) does the compliance monitoring. The system does not require a licensed operator. ECS staff is at the site for 20-30 minutes per month for sampling. The system uses horizontal plates to allow air to strip the VOCs from the water. The system is sealed and can not be observed. Preventive maintenance for the system is scheduled through ENSAT; and the system has required no emergency repairs since installation. The system is equipped with local alarms to indicate problems. The system does not have emergency power. If a prolonged power outage occurred, the influent surge tank would overflow into the parking garage. According to ECS staff, the facility has generally performed well.

LABORATORY INSPECTION

PRESENT DURING INSPECTION:	Doug Frasier, Tim Incheck, David Bookbinder
-----------------------------------	---

1. Do lab records include sampling date/time, analysis date/time, sample location, test method, test results, analyst's initials, instrument calibration and maintenance, and Certificate of Analysis?	
<input checked="" type="checkbox"/> Sampling Date/Time <input checked="" type="checkbox"/> Analysis Date/Time <input type="checkbox"/> Sample Location <input checked="" type="checkbox"/> Test Method <input checked="" type="checkbox"/> Test Results <input checked="" type="checkbox"/> Analyst's Initials <input type="checkbox"/> Instrument Calibration & Maintenance <input type="checkbox"/> Chain of Custody <input checked="" type="checkbox"/> Certificate of Analysis	
2. Are Discharge Monitoring Reports complete and correct?	
Month(s) reviewed: <input type="text" value="July - September 2008"/> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
3. Are sample location(s) according to permit requirements (after all treatment unless otherwise specified)?	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
4. Are sample collection, preservation, and holding times appropriate; and is sampling equipment adequate?	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Are grab and composite samples representative of the flow and the nature of the monitored activity?	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
6. If analysis is performed at another location, are shipping procedures adequate?	
List parameters and name & address of contract lab(s): <ul style="list-style-type: none"> • <u>Volatile Organics analyzed by Maryland Spectral Services</u> Baltimore Maryland Comments: Chain of Custody does not include temperature and pH upon receipt at the laboratory	
7. Is Laboratory equipment in proper operating range? <input type="checkbox"/> Yes <input type="checkbox"/> No	
8. Are annual thermometer calibration(s) adequate? <input type="checkbox"/> Yes <input type="checkbox"/> No	
9. Is the laboratory grade water supply adequate? <input type="checkbox"/> Yes <input type="checkbox"/> No	
10. Are analytical balance(s) adequate? <input type="checkbox"/> Yes <input type="checkbox"/> No	
11. Parameters evaluated during this inspection (attach checklists):	
<input checked="" type="checkbox"/> pH <input type="checkbox"/> Temperature	
<u>Comments:</u> DEQ staff discussed the pH procedure with Mr. Bookbinder. The pH meter is calibrated by ECS laboratory staff each day. No record of the pH meter calibration was available for review in the field. No record was available to show the pH meter thermistor has been compared to a NIST certified thermometer in the past year.	

EFFLUENT FIELD DATA:

Flow		MGD	Dissolved Oxygen		mg/L	TRC (Contact Tank)		mg/L
pH		S.U.	Temperature		°C	TRC (Final Effluent)		mg/L

Was a Sampling Inspection conducted? Yes (see Sampling Inspection Report) No

CONDITION OF OUTFALL AND EFFLUENT CHARACTERISTICS:

1. Type of outfall: Shore based Submerged Diffuser? Yes No
2. Are the outfall and supporting structures in good condition? Yes No
3. Final Effluent (evidence of following problems):

<input type="checkbox"/> Turbid effluent	<input type="checkbox"/> Visible foam	<input type="checkbox"/> Sludge bar	<input type="checkbox"/> Grease
		<input type="checkbox"/> Unusual color	<input type="checkbox"/> Oil sheen
4. Is there a visible effluent plume in the receiving stream? Yes No
5. Receiving stream:

<input type="checkbox"/> No observed problems	<input type="checkbox"/> Indication of problems (explain below)
---	---

Comments: Effluent is discharged to Fairfax County storm drain system.

REQUIRED CORRECTIVE ACTIONS:

1. According to Standard Methods 18th edition, Section 2550 (Temperature), Part B.1, "... Periodically check the thermometer against a precision thermometer certified by NIST." No record was provided to show the pH meter thermistor has been compared to a NIST certified thermometer.
2. According to Standard Methods 18th edition, Section 4500-H⁺, Part B.4.a, "the purpose of standardization is to adjust the response of the glass electrode to the instrument. When only occasional pH measurements are made, standardize the instrument before each use." DEQ requires the pH meter be calibrated at least daily. No records were available to show the pH meter had been calibrated on October 23, 2008.
3. Samples must be preserved according to 40 CFR Part 136. Neither the certificate of analysis nor the chain of custody shows the temperature and pH of samples received by the laboratory.

ECS laboratory staff should provide a copy of the annual thermistor check and daily meter calibration to the field technicians.

**FRESHWATER
WATER QUALITY CRITERIA / WASTELOAD ALLOCATION ANALYSIS**

Facility Name: John Marshall Site III

Permit No.: VA0090093

Receiving Stream: Old Courthouse Spring Branch

Version: OWP Guidance Memo 00-2011 (8/24/00)

Stream Information		Stream Flows		Mixing Information		Effluent Information	
Mean Hardness (as CaCO ₃) =	mg/L	1Q10 (Annual) =	0 MGD	Annual - 1Q10 Mix =	0 %	Mean Hardness (as CaCO ₃) =	50 mg/L
90% Temperature (Annual) =	deg C	7Q10 (Annual) =	0 MGD	- 7Q10 Mix =	0 %	90% Temp (Annual) =	19.4 deg C
90% Temperature (Wet season) =	deg C	30Q10 (Annual) =	0 MGD	- 30Q10 Mix =	0 %	90% Temp (Wet season) =	14.2 deg C
90% Maximum pH =	SU	1Q10 (Wet season) =	0 MGD	Wet Season - 1Q10 Mix =	0 %	90% Maximum pH =	7.6 SU
10% Maximum pH =	SU	30Q10 (Wet season) =	0 MGD	- 30Q10 Mix =	0 %	10% Maximum pH =	SU
Tier Designation (1 or 2) =	1	30Q5 =	0 MGD			Discharge Flow =	0.1224 MGD
Public Water Supply (PWS) Y/N? =	n	Harmonic Mean =	0 MGD				
Trout Present Y/N? =	n	Annual Average =	0 MGD				
Early Life Stages Present Y/N? =	n						

Parameter (ug/l unless noted)	Background Conc.	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Acenaphthene	0	--	--	na	2.7E+03	--	--	na	2.7E+03	--	--	--	--	--	--	--	--	--	--	na	2.7E+03
Acrolein	0	--	--	na	7.8E+02	--	--	na	7.8E+02	--	--	--	--	--	--	--	--	--	--	na	7.8E+02
Acrylonitrile ^c	0	--	--	na	6.6E+00	--	--	na	6.6E+00	--	--	--	--	--	--	--	--	--	--	na	6.6E+00
Aldrin ^c	0	3.0E+00	--	na	1.4E-03	3.0E+00	--	na	1.4E-03	--	--	--	--	--	--	--	--	3.0E+00	--	na	1.4E-03
Ammonia-N (mg/l) (Yearly)	0	1.70E+01	2.90E+00	na	--	1.7E+01	2.9E+00	na	--	--	--	--	--	--	--	--	--	1.7E+01	2.9E+00	na	--
Ammonia-N (mg/l) (High Flow)	0	1.70E+01	4.06E+00	na	--	1.7E+01	4.1E+00	na	--	--	--	--	--	--	--	--	--	1.7E+01	4.1E+00	na	--
Anthracene	0	--	--	na	1.1E+05	--	--	na	1.1E+05	--	--	--	--	--	--	--	--	--	--	na	1.1E+05
Antimony	0	--	--	na	4.3E+03	--	--	na	4.3E+03	--	--	--	--	--	--	--	--	--	--	na	4.3E+03
Arsenic	0	3.4E+02	1.5E+02	na	--	3.4E+02	1.5E+02	na	--	--	--	--	--	--	--	--	--	3.4E+02	1.5E+02	na	--
Barium	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Benzene ^c	0	--	--	na	7.1E+02	--	--	na	7.1E+02	--	--	--	--	--	--	--	--	--	--	na	7.1E+02
Benzidine ^c	0	--	--	na	5.4E-03	--	--	na	5.4E-03	--	--	--	--	--	--	--	--	--	--	na	5.4E-03
Benzo (a) anthracene ^c	0	--	--	na	4.9E-01	--	--	na	4.9E-01	--	--	--	--	--	--	--	--	--	--	na	4.9E-01
Benzo (b) fluoranthene ^c	0	--	--	na	4.9E-01	--	--	na	4.9E-01	--	--	--	--	--	--	--	--	--	--	na	4.9E-01
Benzo (k) fluoranthene ^c	0	--	--	na	4.9E-01	--	--	na	4.9E-01	--	--	--	--	--	--	--	--	--	--	na	4.9E-01
Benzo (a) pyrene ^c	0	--	--	na	4.9E-01	--	--	na	4.9E-01	--	--	--	--	--	--	--	--	--	--	na	4.9E-01
Bis2-Chloroethyl Ether	0	--	--	na	1.4E+01	--	--	na	1.4E+01	--	--	--	--	--	--	--	--	--	--	na	1.4E+01
Bis2-Chloroisopropyl Ether	0	--	--	na	1.7E+05	--	--	na	1.7E+05	--	--	--	--	--	--	--	--	--	--	na	1.7E+05
Bromoform ^c	0	--	--	na	3.6E+03	--	--	na	3.6E+03	--	--	--	--	--	--	--	--	--	--	na	3.6E+03
Butylbenzylphthalate	0	--	--	na	5.2E+03	--	--	na	5.2E+03	--	--	--	--	--	--	--	--	--	--	na	5.2E+03
Cadmium	0	1.8E+00	6.6E-01	na	--	1.8E+00	6.6E-01	na	--	--	--	--	--	--	--	--	--	1.8E+00	6.6E-01	na	--
Carbon Tetrachloride ^c	0	--	--	na	4.4E+01	--	--	na	4.4E+01	--	--	--	--	--	--	--	--	--	--	na	4.4E+01
Chlordane ^c	0	2.4E+00	4.3E-03	na	2.2E-02	2.4E+00	4.3E-03	na	2.2E-02	--	--	--	--	--	--	--	--	2.4E+00	4.3E-03	na	2.2E-02
Chloride	0	8.6E+05	2.3E+05	na	--	8.6E+05	2.3E+05	na	--	--	--	--	--	--	--	--	--	8.6E+05	2.3E+05	na	--
TRC	0	1.9E+01	1.1E+01	na	--	1.9E+01	1.1E+01	na	--	--	--	--	--	--	--	--	--	1.9E+01	1.1E+01	na	--
Chlorobenzene	0	--	--	na	2.1E+04	--	--	na	2.1E+04	--	--	--	--	--	--	--	--	--	--	na	2.1E+04

Parameter (ug/l unless noted)	Background Conc.	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Chlorodibromomethane ^c	0	--	--	na	3.4E+02	--	--	na	3.4E+02	--	--	--	--	--	--	--	--	--	--	na	3.4E+02
Chloroform ^c	0	--	--	na	2.9E+04	--	--	na	2.9E+04	--	--	--	--	--	--	--	--	--	--	na	2.9E+04
2-Chloronaphthalene	0	--	--	na	4.3E+03	--	--	na	4.3E+03	--	--	--	--	--	--	--	--	--	--	na	4.3E+03
2-Chlorophenol	0	--	--	na	4.0E+02	--	--	na	4.0E+02	--	--	--	--	--	--	--	--	--	--	na	4.0E+02
Chlorpyrifos	0	8.3E-02	4.1E-02	na	--	8.3E-02	4.1E-02	na	--	--	--	--	--	--	--	--	--	8.3E-02	4.1E-02	na	--
Chromium III	0	3.2E+02	4.2E+01	na	--	3.2E+02	4.2E+01	na	--	--	--	--	--	--	--	--	--	3.2E+02	4.2E+01	na	--
Chromium VI	0	1.6E+01	1.1E+01	na	--	1.6E+01	1.1E+01	na	--	--	--	--	--	--	--	--	--	1.6E+01	1.1E+01	na	--
Chromium, Total	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Chrysene ^c	0	--	--	na	4.9E-01	--	--	na	4.9E-01	--	--	--	--	--	--	--	--	--	--	na	4.9E-01
Copper	0	7.0E+00	5.0E+00	na	--	7.0E+00	5.0E+00	na	--	--	--	--	--	--	--	--	--	7.0E+00	5.0E+00	na	--
Cyanide	0	2.2E+01	5.2E+00	na	2.2E+05	2.2E+01	5.2E+00	na	2.2E+05	--	--	--	--	--	--	--	--	2.2E+01	5.2E+00	na	2.2E+05
DDD ^c	0	--	--	na	8.4E-03	--	--	na	8.4E-03	--	--	--	--	--	--	--	--	--	--	na	8.4E-03
DDE ^c	0	--	--	na	5.9E-03	--	--	na	5.9E-03	--	--	--	--	--	--	--	--	--	--	na	5.9E-03
DDT ^c	0	1.1E+00	1.0E-03	na	5.9E-03	1.1E+00	1.0E-03	na	5.9E-03	--	--	--	--	--	--	--	--	1.1E+00	1.0E-03	na	5.9E-03
Demeton	0	--	1.0E-01	na	--	--	1.0E-01	na	--	--	--	--	--	--	--	--	--	--	1.0E-01	na	--
Dibenzo(a,h)anthracene ^c	0	--	--	na	4.9E-01	--	--	na	4.9E-01	--	--	--	--	--	--	--	--	--	--	na	4.9E-01
Diethyl phthalate	0	--	--	na	1.2E+04	--	--	na	1.2E+04	--	--	--	--	--	--	--	--	--	--	na	1.2E+04
Dichloromethane (Methylene Chloride) ^c	0	--	--	na	1.6E+04	--	--	na	1.6E+04	--	--	--	--	--	--	--	--	--	--	na	1.6E+04
1,2-Dichlorobenzene	0	--	--	na	1.7E+04	--	--	na	1.7E+04	--	--	--	--	--	--	--	--	--	--	na	1.7E+04
1,3-Dichlorobenzene	0	--	--	na	2.6E+03	--	--	na	2.6E+03	--	--	--	--	--	--	--	--	--	--	na	2.6E+03
1,4-Dichlorobenzene	0	--	--	na	2.6E+03	--	--	na	2.6E+03	--	--	--	--	--	--	--	--	--	--	na	2.6E+03
3,3-Dichlorobenzidine ^c	0	--	--	na	7.7E-01	--	--	na	7.7E-01	--	--	--	--	--	--	--	--	--	--	na	7.7E-01
Dichlorobromomethane ^c	0	--	--	na	4.6E+02	--	--	na	4.6E+02	--	--	--	--	--	--	--	--	--	--	na	4.6E+02
1,2-Dichloroethane ^c	0	--	--	na	9.9E+02	--	--	na	9.9E+02	--	--	--	--	--	--	--	--	--	--	na	9.9E+02
1,1-Dichloroethylene	0	--	--	na	1.7E+04	--	--	na	1.7E+04	--	--	--	--	--	--	--	--	--	--	na	1.7E+04
1,2-trans-dichloroethylene	0	--	--	na	1.4E+05	--	--	na	1.4E+05	--	--	--	--	--	--	--	--	--	--	na	1.4E+05
2,4-Dichlorophenol	0	--	--	na	7.9E+02	--	--	na	7.9E+02	--	--	--	--	--	--	--	--	--	--	na	7.9E+02
2,4-Dichlorophenoxy acetic acid (2,4-D)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
1,2-Dichloropropane ^c	0	--	--	na	3.9E+02	--	--	na	3.9E+02	--	--	--	--	--	--	--	--	--	--	na	3.9E+02
1,3-Dichloropropene	0	--	--	na	1.7E+03	--	--	na	1.7E+03	--	--	--	--	--	--	--	--	--	--	na	1.7E+03
Dieldrin ^c	0	2.4E-01	5.6E-02	na	1.4E-03	2.4E-01	5.6E-02	na	1.4E-03	--	--	--	--	--	--	--	--	2.4E-01	5.6E-02	na	1.4E-03
Diethyl Phthalate	0	--	--	na	1.2E+05	--	--	na	1.2E+05	--	--	--	--	--	--	--	--	--	--	na	1.2E+05
Di-2-Ethylhexyl Phthalate ^c	0	--	--	na	5.9E+01	--	--	na	5.9E+01	--	--	--	--	--	--	--	--	--	--	na	5.9E+01
2,4-Dimethylphenol	0	--	--	na	2.3E+03	--	--	na	2.3E+03	--	--	--	--	--	--	--	--	--	--	na	2.3E+03
Dimethyl Phthalate	0	--	--	na	2.9E+06	--	--	na	2.9E+06	--	--	--	--	--	--	--	--	--	--	na	2.9E+06
Di-n-Butyl Phthalate	0	--	--	na	1.2E+04	--	--	na	1.2E+04	--	--	--	--	--	--	--	--	--	--	na	1.2E+04
2,4 Dinitrophenol	0	--	--	na	1.4E+04	--	--	na	1.4E+04	--	--	--	--	--	--	--	--	--	--	na	1.4E+04
2-Methyl-4,6-Dinitrophenol	0	--	--	na	7.65E+02	--	--	na	7.7E+02	--	--	--	--	--	--	--	--	--	--	na	7.7E+02
2,4-Dinitrotoluene ^c	0	--	--	na	9.1E+01	--	--	na	9.1E+01	--	--	--	--	--	--	--	--	--	--	na	9.1E+01
Dioxin (2,3,7,8-tetrachlorodibenzo-p-dioxin) (ppq)	0	--	--	na	1.2E-06	--	--	na	na	--	--	--	--	--	--	--	--	--	--	na	na
1,2-Diphenylhydrazine ^c	0	--	--	na	5.4E+00	--	--	na	5.4E+00	--	--	--	--	--	--	--	--	--	--	na	5.4E+00
Alpha-Endosulfan	0	2.2E-01	5.6E-02	na	2.4E+02	2.2E-01	5.6E-02	na	2.4E+02	--	--	--	--	--	--	--	--	2.2E-01	5.6E-02	na	2.4E+02
Beta-Endosulfan	0	2.2E-01	5.6E-02	na	2.4E+02	2.2E-01	5.6E-02	na	2.4E+02	--	--	--	--	--	--	--	--	2.2E-01	5.6E-02	na	2.4E+02
Endosulfan Sulfate	0	--	--	na	2.4E+02	--	--	na	2.4E+02	--	--	--	--	--	--	--	--	--	--	na	2.4E+02
Endrin	0	8.6E-02	3.6E-02	na	8.1E-01	8.6E-02	3.6E-02	na	8.1E-01	--	--	--	--	--	--	--	--	8.6E-02	3.6E-02	na	8.1E-01
Endrin Aldehyde	0	--	--	na	8.1E-01	--	--	na	8.1E-01	--	--	--	--	--	--	--	--	--	--	na	8.1E-01

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		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	
Ethylbenzene	0	--	--	na	2.9E+04	--	--	na	2.9E+04	--	--	--	--	--	--	--	--	--	--	na	2.9E+04	
Fluoranthene	0	--	--	na	3.7E+02	--	--	na	3.7E+02	--	--	--	--	--	--	--	--	--	--	na	3.7E+02	
Fluorene	0	--	--	na	1.4E+04	--	--	na	1.4E+04	--	--	--	--	--	--	--	--	--	--	na	1.4E+04	
Foaming Agents	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--	
Guthion	0	--	1.0E-02	na	--	--	1.0E-02	na	--	--	--	--	--	--	--	--	--	1.0E-02	na	--		
Heptachlor C	0	5.2E-01	3.8E-03	na	2.1E-03	5.2E-01	3.8E-03	na	2.1E-03	--	--	--	--	--	--	--	--	5.2E-01	3.8E-03	na	2.1E-03	
Heptachlor Epoxide C	0	5.2E-01	3.8E-03	na	1.1E-03	5.2E-01	3.8E-03	na	1.1E-03	--	--	--	--	--	--	--	--	5.2E-01	3.8E-03	na	1.1E-03	
Hexachlorobenzene C	0	--	--	na	7.7E-03	--	--	na	7.7E-03	--	--	--	--	--	--	--	--	--	--	na	7.7E-03	
Hexachlorobutadiene C	0	--	--	na	5.0E+02	--	--	na	5.0E+02	--	--	--	--	--	--	--	--	--	--	na	5.0E+02	
Hexachlorocyclohexane																						
Alpha-BHC C	0	--	--	na	1.3E-01	--	--	na	1.3E-01	--	--	--	--	--	--	--	--	--	--	na	1.3E-01	
Hexachlorocyclohexane																						
Beta-BHC C	0	--	--	na	4.6E-01	--	--	na	4.6E-01	--	--	--	--	--	--	--	--	--	--	na	4.6E-01	
Hexachlorocyclohexane																						
Gamma-BHC (Lindane)	0	9.5E-01	na	na	6.3E-01	9.5E-01	--	na	6.3E-01	--	--	--	--	--	--	--	--	9.5E-01	--	na	6.3E-01	
Hexachlorocyclopentadiene	0	--	--	na	1.7E+04	--	--	na	1.7E+04	--	--	--	--	--	--	--	--	--	--	na	1.7E+04	
Hexachloroethane C	0	--	--	na	8.9E+01	--	--	na	8.9E+01	--	--	--	--	--	--	--	--	--	--	na	8.9E+01	
Hydrogen Sulfide	0	--	2.0E+00	na	--	--	2.0E+00	na	--	--	--	--	--	--	--	--	--	--	2.0E+00	na	--	
Indeno (1,2,3-cd) pyrene C	0	--	--	na	4.9E-01	--	--	na	4.9E-01	--	--	--	--	--	--	--	--	--	--	na	4.9E-01	
Iron	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--	
Isophorone C	0	--	--	na	2.6E+04	--	--	na	2.6E+04	--	--	--	--	--	--	--	--	--	--	na	2.6E+04	
Kepone	0	--	0.0E+00	na	--	--	0.0E+00	na	--	--	--	--	--	--	--	--	--	0.0E+00	na	--		
Lead	0	4.9E+01	5.6E+00	na	--	4.9E+01	5.6E+00	na	--	--	--	--	--	--	--	--	--	4.9E+01	5.6E+00	na	--	
Malathion	0	--	1.0E-01	na	--	--	1.0E-01	na	--	--	--	--	--	--	--	--	--	1.0E-01	na	--		
Manganese	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	na	--		
Mercury	0	1.4E+00	7.7E-01	na	5.1E-02	1.4E+00	7.7E-01	na	5.1E-02	--	--	--	--	--	--	--	--	1.4E+00	7.7E-01	na	5.1E-02	
Methyl Bromide	0	--	--	na	4.0E+03	--	--	na	4.0E+03	--	--	--	--	--	--	--	--	--	--	na	4.0E+03	
Methoxychlor	0	--	3.0E-02	na	--	--	3.0E-02	na	--	--	--	--	--	--	--	--	--	3.0E-02	na	--		
Mirex	0	--	0.0E+00	na	--	--	0.0E+00	na	--	--	--	--	--	--	--	--	--	0.0E+00	na	--		
Monochlorobenzene	0	--	--	na	2.1E+04	--	--	na	2.1E+04	--	--	--	--	--	--	--	--	--	--	na	2.1E+04	
Nickel	0	1.0E+02	1.1E+01	na	4.6E+03	1.0E+02	1.1E+01	na	4.6E+03	--	--	--	--	--	--	--	--	1.0E+02	1.1E+01	na	4.6E+03	
Nitrate (as N)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--	
Nitrobenzene	0	--	--	na	1.9E+03	--	--	na	1.9E+03	--	--	--	--	--	--	--	--	--	--	na	1.9E+03	
N-Nitrosodimethylamine C	0	--	--	na	8.1E+01	--	--	na	8.1E+01	--	--	--	--	--	--	--	--	--	--	na	8.1E+01	
N-Nitrosodiphenylamine C	0	--	--	na	1.6E+02	--	--	na	1.6E+02	--	--	--	--	--	--	--	--	--	--	na	1.6E+02	
N-Nitrosodi-n-propylamine C	0	--	--	na	1.4E+01	--	--	na	1.4E+01	--	--	--	--	--	--	--	--	--	--	na	1.4E+01	
Parathion	0	6.5E-02	1.3E-02	na	--	6.5E-02	1.3E-02	na	--	--	--	--	--	--	--	--	--	6.5E-02	1.3E-02	na	--	
PCB-1016	0	--	1.4E-02	na	--	--	1.4E-02	na	--	--	--	--	--	--	--	--	--	1.4E-02	na	--		
PCB-1221	0	--	1.4E-02	na	--	--	1.4E-02	na	--	--	--	--	--	--	--	--	--	1.4E-02	na	--		
PCB-1232	0	--	1.4E-02	na	--	--	1.4E-02	na	--	--	--	--	--	--	--	--	--	1.4E-02	na	--		
PCB-1242	0	--	1.4E-02	na	--	--	1.4E-02	na	--	--	--	--	--	--	--	--	--	1.4E-02	na	--		
PCB-1248	0	--	1.4E-02	na	--	--	1.4E-02	na	--	--	--	--	--	--	--	--	--	1.4E-02	na	--		
PCB-1254	0	--	1.4E-02	na	--	--	1.4E-02	na	--	--	--	--	--	--	--	--	--	1.4E-02	na	--		
PCB-1260	0	--	1.4E-02	na	--	--	1.4E-02	na	--	--	--	--	--	--	--	--	--	1.4E-02	na	--		
PCB Total C	0	--	--	na	1.7E-03	--	--	na	1.7E-03	--	--	--	--	--	--	--	--	--	na	1.7E-03		

Parameter (ug/l unless noted)	Background Conc.	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Pentachlorophenol ^c	0	7.7E-03	5.9E-03	na	8.2E+01	7.7E-03	5.9E-03	na	8.2E+01	--	--	--	--	--	--	--	--	7.7E-03	5.9E-03	na	8.2E+01
Phenol	0	--	--	na	4.6E+06	--	--	na	4.6E+06	--	--	--	--	--	--	--	--	--	--	na	4.6E+06
Pyrene	0	--	--	na	1.1E+04	--	--	na	1.1E+04	--	--	--	--	--	--	--	--	--	--	na	1.1E+04
Radionuclides (pCi/l except Beta/Photon)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Gross Alpha Activity Beta and Photon Activity (mrem/yr)	0	--	--	na	1.5E+01	--	--	na	1.5E+01	--	--	--	--	--	--	--	--	--	--	na	1.5E+01
Strontium-90	0	--	--	na	4.0E+00	--	--	na	4.0E+00	--	--	--	--	--	--	--	--	--	--	na	4.0E+00
Tritium	0	--	--	na	8.0E+00	--	--	na	8.0E+00	--	--	--	--	--	--	--	--	--	--	na	8.0E+00
Selenium	0	2.0E+01	5.0E+00	na	1.1E+04	2.0E+01	5.0E+00	na	1.1E+04	--	--	--	--	--	--	--	--	2.0E+01	5.0E+00	na	1.1E+04
Silver	0	1.0E+00	--	na	--	1.0E+00	--	na	--	--	--	--	--	--	--	--	--	1.0E+00	--	na	--
Sulfate	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
1,1,2,2-Tetrachloroethane ^c	0	--	--	na	1.1E+02	--	--	na	1.1E+02	--	--	--	--	--	--	--	--	--	--	na	1.1E+02
Tetrachloroethylene ^c	0	--	--	na	8.9E+01	--	--	na	8.9E+01	--	--	--	--	--	--	--	--	--	--	na	8.9E+01
Thallium	0	--	--	na	6.3E+00	--	--	na	6.3E+00	--	--	--	--	--	--	--	--	--	--	na	6.3E+00
Toluene	0	--	--	na	2.0E+05	--	--	na	2.0E+05	--	--	--	--	--	--	--	--	--	--	na	2.0E+05
Total dissolved solids	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Toxaphene ^c	0	7.3E-01	2.0E-04	na	7.5E-03	7.3E-01	2.0E-04	na	7.5E-03	--	--	--	--	--	--	--	--	7.3E-01	2.0E-04	na	7.5E-03
Tributyltin	0	4.6E-01	6.3E-02	na	--	4.6E-01	6.3E-02	na	--	--	--	--	--	--	--	--	--	4.6E-01	6.3E-02	na	--
1,2,4-Trichlorobenzene	0	--	--	na	9.4E+02	--	--	na	9.4E+02	--	--	--	--	--	--	--	--	--	--	na	9.4E+02
1,1,2-Trichloroethane ^c	0	--	--	na	4.2E+02	--	--	na	4.2E+02	--	--	--	--	--	--	--	--	--	--	na	4.2E+02
Trichloroethylene ^c	0	--	--	na	8.1E+02	--	--	na	8.1E+02	--	--	--	--	--	--	--	--	--	--	na	8.1E+02
2,4,6-Trichlorophenol ^c	0	--	--	na	6.5E+01	--	--	na	6.5E+01	--	--	--	--	--	--	--	--	--	--	na	6.5E+01
2-(2,4,5-Trichlorophenoxy) propionic acid (Silvex)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Vinyl Chloride ^c	0	--	--	na	6.1E+01	--	--	na	6.1E+01	--	--	--	--	--	--	--	--	--	--	na	6.1E+01
Zinc	0	6.5E+01	6.6E+01	na	6.9E+04	6.5E+01	6.6E+01	na	6.9E+04	--	--	--	--	--	--	--	--	6.5E+01	6.6E+01	na	6.9E+04

Notes:

- All concentrations expressed as micrograms/liter (ug/l), unless noted otherwise
- Discharge flow is highest monthly average or Form 2C maximum for Industries and design flow for Municipal
- Metals measured as Dissolved, unless specified otherwise
- "C" indicates a carcinogenic parameter
- Regular WLAs are mass balances (minus background concentration) using the % of stream flow entered above under Mixing Information. Antidegradation WLAs are based upon a complete mix.
- Antideg. Baseline = (0.25(WQC - background conc.) + background conc.) for acute and chronic
= (0.1(WQC - background conc.) + background conc.) for human health
- WLAs established at the following stream flows: 1Q10 for Acute, 30Q10 for Chronic Ammonia, 7Q10 for Other Chronic, 30Q5 for Non-carcinogens, Harmonic Mean for Carcinogens, and Annual Average for Dioxin. Mixing ratios may be substituted for stream flows where appropriate.

Metal	Target Value (SSTV)
Antimony	4.3E+03
Arsenic	9.0E+01
Barium	na
Cadmium	3.9E-01
Chromium III	2.5E+01
Chromium VI	6.4E+00
Copper	2.8E+00
Iron	na
Lead	3.4E+00
Manganese	na
Mercury	5.1E-02
Nickel	6.8E+00
Selenium	3.0E+00
Silver	4.2E-01
Zinc	2.6E+01

Note: do not use QL's lower than the minimum QL's provided in agency guidance

DMR QA/QC

Permit #: VA0090093	Facility:John Marshall III Site
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Rec'd	Parameter Description	QTY AVG	Lim Avg	QTY MAX	Lim Max	CONC MIN	Lim Min	CONC AVG	Lim Avg	CONC MAX	Lim Max
14-Oct-2004	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
03-Feb-2005	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
07-Mar-2005	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
07-Apr-2005	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
05-May-2005	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
03-Jun-2005	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
29-Jun-2005	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
03-Aug-2005	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
08-Sep-2005	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
07-Oct-2005	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
02-Nov-2005	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
06-Dec-2005	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
06-Jan-2006	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
06-Feb-2006	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
07-Mar-2006	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
11-Apr-2006	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
04-May-2006	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
07-Jun-2006	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
07-Jul-2006	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
07-Aug-2006	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
11-Sep-2006	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
10-Oct-2006	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
10-Oct-2006	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
07-Nov-2006	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
11-Dec-2006	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
10-Jan-2007	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
10-Jan-2007	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
12-Feb-2007	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
07-Mar-2007	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL

10-Apr-2007	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
10-May-2007	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
11-Jun-2007	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
17-Jul-2007	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
14-Aug-2007	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
13-Sep-2007	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
17-Oct-2007	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
17-Oct-2007	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
15-Nov-2007	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
05-Dec-2007	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
07-Jan-2008	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
10-Jan-2008	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
31-Jan-2008	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
06-Mar-2008	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
27-Mar-2008	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
27-Mar-2008	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<10.0	NL
02-May-2008	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
06-Jun-2008	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
07-Jul-2008	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
10-Jul-2008	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
30-Jul-2008	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
04-Sep-2008	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
02-Oct-2008	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
10-Oct-2008	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
05-Nov-2008	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
05-Dec-2008	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
06-Jan-2009	CHLOROFORM (AS CHCL3)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
14-Oct-2004	FLOW	00032	NL	0.000050	NL	NULL	*****	NULL	*****	NULL	*****
03-Feb-2005	FLOW	00092	NL	0.00018	NL	NULL	*****	NULL	*****	NULL	*****
07-Mar-2005	FLOW	00005	NL	0.00010	NL	NULL	*****	NULL	*****	NULL	*****
07-Apr-2005	FLOW	00001	NL	0.00002	NL	NULL	*****	NULL	*****	NULL	*****
05-May-2005	FLOW	00005	NL	0.0001	NL	NULL	*****	NULL	*****	NULL	*****
03-Jun-2005	FLOW	00002	NL	0.00004	NL	NULL	*****	NULL	*****	NULL	*****
29-Jun-2005	FLOW	00003	NL	0.00006	NL	NULL	*****	NULL	*****	NULL	*****
03-Aug-2005	FLOW	00012	NL	0.00025	NL	NULL	*****	NULL	*****	NULL	*****

08-Sep-2005	FLOW	00184	NL	0.000368	NL	NULL	*****	NULL	*****	NULL	*****
07-Oct-2005	FLOW	00002	NL	0.000004	NL	NULL	*****	NULL	*****	NULL	*****
02-Nov-2005	FLOW	00037	NL	0.000074	NL	NULL	*****	NULL	*****	NULL	*****
06-Dec-2005	FLOW	00316	NL	0.000632	NL	NULL	*****	NULL	*****	NULL	*****
06-Jan-2006	FLOW	00067	NL	0.000134	NL	NULL	*****	NULL	*****	NULL	*****
06-Feb-2006	FLOW	00023	NL	0.00046	NL	NULL	*****	NULL	*****	NULL	*****
07-Mar-2006	FLOW	00443	NL	0.000886	NL	NULL	*****	NULL	*****	NULL	*****
11-Apr-2006	FLOW	00041	NL	0.000082	NL	NULL	*****	NULL	*****	NULL	*****
04-May-2006	FLOW	00016	NL	0.000032	NL	NULL	*****	NULL	*****	NULL	*****
07-Jun-2006	FLOW	00023	NL	0.000046	NL	NULL	*****	NULL	*****	NULL	*****
07-Jul-2006	FLOW	00004	NL	0.000008	NL	NULL	*****	NULL	*****	NULL	*****
07-Aug-2006	FLOW	00161	NL	0.000322	NL	NULL	*****	NULL	*****	NULL	*****
11-Sep-2006	FLOW	00003	NL	0.000006	NL	NULL	*****	NULL	*****	NULL	*****
10-Oct-2006	FLOW	NR	NL	NR	NL	NULL	*****	NULL	*****	NULL	*****
10-Oct-2006	FLOW	00002	NL	0.000004	NL	NULL	*****	NULL	*****	NULL	*****
07-Nov-2006	FLOW	00020	NL	0.000040	NL	NULL	*****	NULL	*****	NULL	*****
11-Dec-2006	FLOW	00344	NL	0.000688	NL	NULL	*****	NULL	*****	NULL	*****
10-Jan-2007	FLOW	NR	NL	NR	NL	NULL	*****	NULL	*****	NULL	*****
10-Jan-2007	FLOW	00018	NL	0.000036	NL	NULL	*****	NULL	*****	NULL	*****
12-Feb-2007	FLOW	00019	NL	0.000036	NL	NULL	*****	NULL	*****	NULL	*****
07-Mar-2007	FLOW	00003	NL	0.000006	NL	NULL	*****	NULL	*****	NULL	*****
10-Apr-2007	FLOW	00054	NL	0.000108	NL	NULL	*****	NULL	*****	NULL	*****
10-May-2007	FLOW	00149	NL	0.000298	NL	NULL	*****	NULL	*****	NULL	*****
11-Jun-2007	FLOW	00004	NL	0.000008	NL	NULL	*****	NULL	*****	NULL	*****
17-Jul-2007	FLOW	00020	NL	0.000040	NL	NULL	*****	NULL	*****	NULL	*****
14-Aug-2007	FLOW	00004	NL	0.000008	NL	NULL	*****	NULL	*****	NULL	*****
13-Sep-2007	FLOW	00004	NL	0.000008	NL	NULL	*****	NULL	*****	NULL	*****
17-Oct-2007	FLOW	NR	NL	NR	NL	NULL	*****	NULL	*****	NULL	*****
17-Oct-2007	FLOW	00003	NL	0.000006	NL	NULL	*****	NULL	*****	NULL	*****
15-Nov-2007	FLOW	00018	NL	0.000036	NL	NULL	*****	NULL	*****	NULL	*****
05-Dec-2007	FLOW	00088	NL	0.000176	NL	NULL	*****	NULL	*****	NULL	*****
07-Jan-2008	FLOW	00185	NL	0.000370	NL	NULL	*****	NULL	*****	NULL	*****
10-Jan-2008	FLOW	Nr	NL	NR	NL	NULL	*****	NULL	*****	NULL	*****
31-Jan-2008	FLOW	00424	NL	0.000848	NL	NULL	*****	NULL	*****	NULL	*****
06-Mar-2008	FLOW	00056	NL	0.000112	NL	NULL	*****	NULL	*****	NULL	*****

27-Mar-2008	FLOW	NR	NL	NR	NL	NULL	*****	NULL	*****	NULL	*****
27-Mar-2008	FLOW	00047	NL	0.000094	NL	NULL	*****	NULL	*****	NULL	*****
02-May-2008	FLOW	00012	NL	0.000024	NL	NULL	*****	NULL	*****	NULL	*****
06-Jun-2008	FLOW	00511	NL	0.001022	NL	NULL	*****	NULL	*****	NULL	*****
07-Jul-2008	FLOW	00114	NL	0.000228	NL	NULL	*****	NULL	*****	NULL	*****
10-Jul-2008	FLOW	NR	NL	NR	NL	NULL	*****	NULL	*****	NULL	*****
30-Jul-2008	FLOW	00006	NL	0.000012	NL	NULL	*****	NULL	*****	NULL	*****
04-Sep-2008	FLOW	00018	NL	0.000036	NL	NULL	*****	NULL	*****	NULL	*****
02-Oct-2008	FLOW	00025	NL	0.000050	NL	NULL	*****	NULL	*****	NULL	*****
10-Oct-2008	FLOW	NR	NL	NR	NL	NULL	*****	NULL	*****	NULL	*****
05-Nov-2008	FLOW	00061	NL	0.000122	NL	NULL	*****	NULL	*****	NULL	*****
05-Dec-2008	FLOW	00031	NL	0.000062	NL	NULL	*****	NULL	*****	NULL	*****
06-Jan-2009	FLOW	00044	NL	0.000008	NL	NULL	*****	NULL	*****	NULL	*****
14-Oct-2004	METHYLENE CHLORIDE	NULL	*****	NULL	NULL	*****	NULL	NULL	*****	<5	NL
03-Feb-2005	METHYLENE CHLORIDE	NULL	*****	NULL	NULL	*****	NULL	NULL	*****	<5	NL
07-Mar-2005	METHYLENE CHLORIDE	NULL	*****	NULL	NULL	*****	NULL	NULL	*****	<55	NL
07-Apr-2005	METHYLENE CHLORIDE	NULL	*****	NULL	NULL	*****	NULL	NULL	*****	<5	NL
05-May-2005	METHYLENE CHLORIDE	NULL	*****	NULL	NULL	*****	NULL	NULL	*****	<5	NL
03-Jun-2005	METHYLENE CHLORIDE	NULL	*****	NULL	NULL	*****	NULL	NULL	*****	<5	NL
29-Jun-2005	METHYLENE CHLORIDE	NULL	*****	NULL	NULL	*****	NULL	NULL	*****	<5	NL
03-Aug-2005	METHYLENE CHLORIDE	NULL	*****	NULL	NULL	*****	NULL	NULL	*****	<5	NL
08-Sep-2005	METHYLENE CHLORIDE	NULL	*****	NULL	NULL	*****	NULL	NULL	*****	<5	NL
07-Oct-2005	METHYLENE CHLORIDE	NULL	*****	NULL	NULL	*****	NULL	NULL	*****	<5	NL
02-Nov-2005	METHYLENE CHLORIDE	NULL	*****	NULL	NULL	*****	NULL	NULL	*****	<5	NL
06-Dec-2005	METHYLENE CHLORIDE	NULL	*****	NULL	NULL	*****	NULL	NULL	*****	<5	NL
06-Jan-2006	METHYLENE CHLORIDE	NULL	*****	NULL	NULL	*****	NULL	NULL	*****	<5	NL
06-Feb-2006	METHYLENE CHLORIDE	NULL	*****	NULL	NULL	*****	NULL	NULL	*****	<5	NL
07-Mar-2006	METHYLENE CHLORIDE	NULL	*****	NULL	NULL	*****	NULL	NULL	*****	<5	NL
11-Apr-2006	METHYLENE CHLORIDE	NULL	*****	NULL	NULL	*****	NULL	NULL	*****	<5	NL
04-May-2006	METHYLENE CHLORIDE	NULL	*****	NULL	NULL	*****	NULL	NULL	*****	<5	NL
07-Jun-2006	METHYLENE CHLORIDE	NULL	*****	NULL	NULL	*****	NULL	NULL	*****	<5.0	NL
07-Jul-2006	METHYLENE CHLORIDE	NULL	*****	NULL	NULL	*****	NULL	NULL	*****	<5.0	NL
07-Aug-2006	METHYLENE CHLORIDE	NULL	*****	NULL	NULL	*****	NULL	NULL	*****	<5.0	NL
11-Sep-2006	METHYLENE CHLORIDE	NULL	*****	NULL	NULL	*****	NULL	NULL	*****	<5	NL
10-Oct-2006	METHYLENE CHLORIDE	NULL	*****	NULL	NULL	*****	NULL	NULL	*****	NR	NL

10-Oct-2006	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
07-Nov-2006	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
11-Dec-2006	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
10-Jan-2007	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
10-Jan-2007	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
12-Feb-2007	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
07-Mar-2007	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
10-Apr-2007	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
10-May-2007	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
11-Jun-2007	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
17-Jul-2007	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
14-Aug-2007	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
13-Sep-2007	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
17-Oct-2007	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
17-Oct-2007	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
15-Nov-2007	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
05-Dec-2007	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
07-Jan-2008	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
10-Jan-2008	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
31-Jan-2008	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
06-Mar-2008	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
27-Mar-2008	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
27-Mar-2008	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<10.0	NL
02-May-2008	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
06-Jun-2008	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
07-Jul-2008	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
10-Jul-2008	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
30-Jul-2008	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
04-Sep-2008	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
02-Oct-2008	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
10-Oct-2008	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
05-Nov-2008	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
05-Dec-2008	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
06-Jan-2009	METHYLENE CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
14-Oct-2004	PH	NULL	*****	NULL	*****	7.1	6.0	NULL	*****	7.4	9.0

03-Feb-2005	PH	NULL	*****	NULL	*****	7.1	6.0	NULL	*****	7.1	9.0
07-Mar-2005	PH	NULL	*****	NULL	*****	6.8	6.0	NULL	*****	6.8	9.0
07-Apr-2005	PH	NULL	*****	NULL	*****	6.75	6.0	NULL	*****	6.75	9.0
05-May-2005	PH	NULL	*****	NULL	*****	7.1	6.0	NULL	*****	7.1	9.0
03-Jun-2005	PH	NULL	*****	NULL	*****	6.9	6.0	NULL	*****	6.9	9.0
29-Jun-2005	PH	NULL	*****	NULL	*****	7.1	6.0	NULL	*****	7.1	9.0
03-Aug-2005	PH	NULL	*****	NULL	*****	7.2	6.0	NULL	*****	7.2	9.0
08-Sep-2005	PH	NULL	*****	NULL	*****	6.8	6.0	NULL	*****	6.8	9.0
07-Oct-2005	PH	NULL	*****	NULL	*****	6.8	6.0	NULL	*****	6.8	9.0
02-Nov-2005	PH	NULL	*****	NULL	*****	6.9	6.0	NULL	*****	6.9	9.0
06-Dec-2005	PH	NULL	*****	NULL	*****	7.1	6.0	NULL	*****	7.1	9.0
06-Jan-2006	PH	NULL	*****	NULL	*****	6.9	6.0	NULL	*****	6.9	9.0
06-Feb-2006	PH	NULL	*****	NULL	*****	7.35	6.0	NULL	*****	7.35	9.0
07-Mar-2006	PH	NULL	*****	NULL	*****	7.15	6.0	NULL	*****	7.15	9.0
11-Apr-2006	PH	NULL	*****	NULL	*****	7.47	6.0	NULL	*****	7.47	9.0
04-May-2006	PH	NULL	*****	NULL	*****	7.36	6.0	NULL	*****	7.36	9.0
07-Jun-2006	PH	NULL	*****	NULL	*****	7.25	6.0	NULL	*****	7.25	9.0
07-Jul-2006	PH	NULL	*****	NULL	*****	7.00	6.0	NULL	*****	7.00	9.0
07-Aug-2006	PH	NULL	*****	NULL	*****	7.49	6.0	NULL	*****	7.49	9.0
11-Sep-2006	PH	NULL	*****	NULL	*****	6.98	6.0	NULL	*****	6.98	9.0
10-Oct-2006	PH	NULL	*****	NULL	*****	NR	6.0	NULL	*****	NR	9.0
10-Oct-2006	PH	NULL	*****	NULL	*****	7.41	6.0	NULL	*****	7.41	9.0
07-Nov-2006	PH	NULL	*****	NULL	*****	7.67	6.0	NULL	*****	7.67	9.0
11-Dec-2006	PH	NULL	*****	NULL	*****	7.06	6.0	NULL	*****	7.06	9.0
10-Jan-2007	PH	NULL	*****	NULL	*****	NR	6.0	NULL	*****	NR	9.0
10-Jan-2007	PH	NULL	*****	NULL	*****	7.44	6.0	NULL	*****	7.44	9.0
12-Feb-2007	PH	NULL	*****	NULL	*****	7.08	6.0	NULL	*****	7.08	9.0
07-Mar-2007	PH	NULL	*****	NULL	*****	7.02	6.0	NULL	*****	7.02	9.0
10-Apr-2007	PH	NULL	*****	NULL	*****	6.84	6.0	NULL	*****	6.84	9.0
10-May-2007	PH	NULL	*****	NULL	*****	7.14	6.0	NULL	*****	7.14	9.0
11-Jun-2007	PH	NULL	*****	NULL	*****	7.22	6.0	NULL	*****	7.22	9.0
17-Jul-2007	PH	NULL	*****	NULL	*****	7.02	6.0	NULL	*****	7.02	9.0
14-Aug-2007	PH	NULL	*****	NULL	*****	7.33	6.0	NULL	*****	7.33	9.0
13-Sep-2007	PH	NULL	*****	NULL	*****	7.65	6.0	NULL	*****	7.65	9.0
17-Oct-2007	PH	NULL	*****	NULL	*****	NR	6.0	NULL	*****	NR	9.0

17-Oct-2007	PH	NULL	*****	NULL	*****	7.04	6.0	NULL	*****	7.04	9.0
15-Nov-2007	PH	NULL	*****	NULL	*****	6.80	6.0	NULL	*****	6.80	9.0
05-Dec-2007	PH	NULL	*****	NULL	*****	8.66	6.0	NULL	*****	8.66	9.0
07-Jan-2008	PH	NULL	*****	NULL	*****	6.31	6.0	NULL	*****	6.31	9.0
10-Jan-2008	PH	NULL	*****	NULL	*****	NR	6.0	NULL	*****	NR	9.0
31-Jan-2008	PH	NULL	*****	NULL	*****	8.65	6.0	NULL	*****	8.65	9.0
06-Mar-2008	PH	NULL	*****	NULL	*****	7.75	6.0	NULL	*****	7.75	9.0
27-Mar-2008	PH	NULL	*****	NULL	*****	NR	6.0	NULL	*****	NR	9.0
27-Mar-2008	PH	NULL	*****	NULL	*****	7.90	6.0	NULL	*****	7.90	9.0
02-May-2008	PH	NULL	*****	NULL	*****	6.46	6.0	NULL	*****	6.46	9.0
06-Jun-2008	PH	NULL	*****	NULL	*****	7.14	6.0	NULL	*****	7.14	9.0
07-Jul-2008	PH	NULL	*****	NULL	*****	7.23	6.0	NULL	*****	7.23	9.0
10-Jul-2008	PH	NULL	*****	NULL	*****	NR	6.0	NULL	*****	NR	9.0
30-Jul-2008	PH	NULL	*****	NULL	*****	7.45	6.0	NULL	*****	7.45	9.0
04-Sep-2008	PH	NULL	*****	NULL	*****	7.72	6.0	NULL	*****	7.72	9.0
02-Oct-2008	PH	NULL	*****	NULL	*****	7.86	6.0	NULL	*****	7.86	9.0
10-Oct-2008	PH	NULL	*****	NULL	*****	NR	6.0	NULL	*****	NR	9.0
05-Nov-2008	PH	NULL	*****	NULL	*****	7.93	6.0	NULL	*****	7.93	9.0
05-Dec-2008	PH	NULL	*****	NULL	*****	7.61	6.0	NULL	*****	7.61	9.0
06-Jan-2009	PH	NULL	*****	NULL	*****	6.93	6.0	NULL	*****	6.93	9.0
14-Oct-2004	TETRACHLOROETHYLENE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
03-Feb-2005	TETRACHLOROETHYLENE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
07-Mar-2005	TETRACHLOROETHYLENE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
07-Apr-2005	TETRACHLOROETHYLENE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
05-May-2005	TETRACHLOROETHYLENE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
03-Jun-2005	TETRACHLOROETHYLENE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
29-Jun-2005	TETRACHLOROETHYLENE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
03-Aug-2005	TETRACHLOROETHYLENE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
08-Sep-2005	TETRACHLOROETHYLENE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
07-Oct-2005	TETRACHLOROETHYLENE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
02-Nov-2005	TETRACHLOROETHYLENE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
06-Dec-2005	TETRACHLOROETHYLENE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
06-Jan-2006	TETRACHLOROETHYLENE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
06-Feb-2006	TETRACHLOROETHYLENE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	2.1	NL
07-Mar-2006	TETRACHLOROETHYLENE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	14.0	NL

04-Sep-2008	TETRACHLOROETHYLENE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
02-Oct-2008	TETRACHLOROETHYLENE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
10-Oct-2008	TETRACHLOROETHYLENE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
05-Nov-2008	TETRACHLOROETHYLENE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
05-Dec-2008	TETRACHLOROETHYLENE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
06-Jan-2009	TETRACHLOROETHYLENE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
14-Oct-2004	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	12	NL
03-Feb-2005	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
07-Mar-2005	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	4.4	NL
07-Apr-2005	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	9.1	NL
05-May-2005	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
03-Jun-2005	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	23	NL
29-Jun-2005	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	23.0	NL
03-Aug-2005	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	3.6	NL
08-Sep-2005	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	9.2	NL
07-Oct-2005	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	2.7	NL
02-Nov-2005	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
06-Dec-2005	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
06-Jan-2006	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	6.1	NL
06-Feb-2006	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
07-Mar-2006	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
11-Apr-2006	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
04-May-2006	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL

07-Jun-2006	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
07-Jul-2006	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
07-Aug-2006	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	2.6	NL
11-Sep-2006	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	101	NL
10-Oct-2006	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
10-Oct-2006	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
07-Nov-2006	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
11-Dec-2006	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	6.8	NL
10-Jan-2007	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
10-Jan-2007	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
12-Feb-2007	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
07-Mar-2007	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	4.5	NL
10-Apr-2007	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
10-May-2007	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	9.7	NL
11-Jun-2007	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	195	NL
17-Jul-2007	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	3.2	NL
14-Aug-2007	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
13-Sep-2007	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
17-Oct-2007	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
17-Oct-2007	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	9.7	NL
15-Nov-2007	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	6.7	NL

05-Dec-2007	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
07-Jan-2008	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
10-Jan-2008	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
31-Jan-2008	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
06-Mar-2008	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	2.6	NL
27-Mar-2008	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
27-Mar-2008	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	254	NL
02-May-2008	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
06-Jun-2008	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
07-Jul-2008	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
10-Jul-2008	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
30-Jul-2008	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
04-Sep-2008	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
02-Oct-2008	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
10-Oct-2008	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
05-Nov-2008	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
05-Dec-2008	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
06-Jan-2009	TRICHLOROETHYLENE (TCE) (79016)	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
09-Jul-2004	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
14-Oct-2004	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
03-Feb-2005	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
07-Mar-2005	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
07-Apr-2005	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL

05-May-2005	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
03-Jun-2005	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
29-Jun-2005	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
03-Aug-2005	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
08-Sep-2005	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
07-Oct-2005	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
02-Nov-2005	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
06-Dec-2005	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
06-Jan-2006	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
06-Feb-2006	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
07-Mar-2006	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
11-Apr-2006	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
04-May-2006	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
07-Jun-2006	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
07-Jul-2006	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
07-Aug-2006	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
11-Sep-2006	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5	NL
10-Oct-2006	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
10-Oct-2006	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
07-Nov-2006	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
11-Dec-2006	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
10-Jan-2007	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
10-Jan-2007	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
12-Feb-2007	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
07-Mar-2007	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
10-Apr-2007	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
10-May-2007	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
11-Jun-2007	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	2.6	NL
17-Jul-2007	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
14-Aug-2007	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
13-Sep-2007	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
17-Oct-2007	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
17-Oct-2007	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
15-Nov-2007	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
05-Dec-2007	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL

07-Jan-2008	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
10-Jan-2008	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
31-Jan-2008	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
06-Mar-2008	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
27-Mar-2008	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
27-Mar-2008	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<10.0	NL
02-May-2008	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
06-Jun-2008	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
07-Jul-2008	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
10-Jul-2008	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
30-Jul-2008	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
04-Sep-2008	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
02-Oct-2008	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
10-Oct-2008	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	NR	NL
05-Nov-2008	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
05-Dec-2008	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL
06-Jan-2009	VINYL CHLORIDE	NULL	*****	NULL	*****	NULL	*****	NULL	*****	<5.0	NL

Public Notice – Environmental Permit

PURPOSE OF NOTICE: To seek public comment on a draft permit from the Department of Environmental Quality that will allow the release of groundwater into a water body in Fairfax County, Virginia.

PUBLIC COMMENT PERIOD: February 3, 2010 to 5:00 p.m. on March 5, 2010

PERMIT NAME: Virginia Pollutant Discharge Elimination System Permit – Wastewater issued by DEQ, under the authority of the State Water Control Board

APPLICANT NAME, ADDRESS AND PERMIT NUMBER: Marshall Property LLC
8251 Greensboro Drive, B100, McLean, VA 22102
VA0090093

NAME AND ADDRESS OF FACILITY: John Marshall III Site
8283-C Greensboro Drive, McLean, VA 22102

PROJECT DESCRIPTION: Marshall Property LLC has applied for a reissuance of a permit for the private John Marshall III Site. The applicant proposes to release groundwater from a commercial area at a rate of 0.1224 million gallons per day into a water body. Sludge is not generated at this facility. The facility proposes to release groundwater in the Old Courthouse Spring Branch in Fairfax County in the Potomac River watershed. A watershed is the land area drained by a river and its incoming streams. The permit will limit the following pollutants to amounts that protect water quality: pH, Vinyl Chloride, Methylene Chloride, Chloroform, Trichloroethylene and Tetrachloroethylene.

HOW TO COMMENT AND/OR REQUEST A PUBLIC HEARING: DEQ accepts comments and requests for public hearing by e-mail, fax or postal mail. All comments and requests must be in writing and be received by DEQ during the comment period. Submittals must include the names, mailing addresses and telephone numbers of the commenter/requester and of all persons represented by the commenter/requester. A request for public hearing must also include: 1) The reason why a public hearing is requested. 2) A brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requestor, including how and to what extent such interest would be directly and adversely affected by the permit. 3) Specific references, where possible, to terms and conditions of the permit with suggested revisions. DEQ may hold a public hearing, including another comment period, if public response is significant and there are substantial, disputed issues relevant to the permit.

CONTACT FOR PUBLIC COMMENTS, DOCUMENT REQUESTS AND ADDITIONAL INFORMATION: The public may review the documents at the DEQ-Northern Regional Office by appointment, or may request electronic copies of the draft permit and fact sheet.

Name: Douglas Frasier
Address: DEQ-Northern Regional Office; 13901 Crown Court; Woodbridge, VA 22193
Phone: (703) 583-3873 E-mail: Douglas.Frasier@deq.virginia.gov Fax: (703) 583-3821

Revised 2/2003

State "Transmittal Checklist" to Assist in Targeting
Municipal and Industrial Individual NPDES Draft Permits for Review

Part I. State Draft Permit Submission Checklist

In accordance with the MOA established between the Commonwealth of Virginia and the United States Environmental Protection Agency, Region III, the Commonwealth submits the following draft National Pollutant Discharge Elimination System (NPDES) permit for Agency review and concurrence.

Facility Name:	John Marshall III Site
NPDES Permit Number:	VA0090093
Permit Writer Name:	Douglas Frasier
Date:	4 February 2009

Major [] Minor [X] Industrial [X] Municipal []

I.A. Draft Permit Package Submittal Includes:		
	Yes	No
	N/A	
1. Permit Application?	X	
2. Complete Draft Permit (for renewal or first time permit – entire permit, including boilerplate information)?	X	
3. Copy of Public Notice?	X	
4. Complete Fact Sheet?	X	
5. A Priority Pollutant Screening to determine parameters of concern?	X	
6. A Reasonable Potential analysis showing calculated WQBELs?	X	
7. Dissolved Oxygen calculations?		X
8. Whole Effluent Toxicity Test summary and analysis?		X
9. Permit Rating Sheet for new or modified industrial facilities?	X	

I.B. Permit/Facility Characteristics		
	Yes	No
	N/A	
1. Is this a new, or currently unpermitted facility?		X
2. Are all permissible outfalls (including combined sewer overflow points, non-process water and storm water) from the facility properly identified and authorized in the permit?	X	
3. Does the fact sheet or permit contain a description of the wastewater treatment process?	X	
4. Does the review of PCS/DMR data for at least the last 3 years indicate significant non-compliance with the existing permit?		X
5. Has there been any change in streamflow characteristics since the last permit was developed?		X
6. Does the permit allow the discharge of new or increased loadings of any pollutants?		X
7. Does the fact sheet or permit provide a description of the receiving water body(s) to which the facility discharges, including information on low/critical flow conditions and designated/existing uses?	X	
8. Does the facility discharge to a 303(d) listed water?		X
a. Has a TMDL been developed and approved by EPA for the impaired water?		X
b. Does the record indicate that the TMDL development is on the State priority list and will most likely be developed within the life of the permit?		X
c. Does the facility discharge a pollutant of concern identified in the TMDL or 303(d) listed water?		X
9. Have any limits been removed, or are any limits less stringent, than those in the current permit?		X
10. Does the permit authorize discharges of storm water?		X

I.B. Permit/Facility Characteristics – cont.	Yes	No	N/A
11. Has the facility substantially enlarged or altered its operation or substantially increased its flow or production?		X	
12. Are there any production-based, technology-based effluent limits in the permit?	X		
13. Do any water quality-based effluent limit calculations differ from the State's standard policies or procedures?			X
14. Are any WQBELs based on an interpretation of narrative criteria?			X
15. Does the permit incorporate any variances or other exceptions to the State's standards or regulations?		X	
16. Does the permit contain a compliance schedule for any limit or condition?		X	
17. Is there a potential impact to endangered/threatened species or their habitat by the facility's discharge(s)?		X	
18. Have impacts from the discharge(s) at downstream potable water supplies been evaluated?	X		
19. Is there any indication that there is significant public interest in the permit action proposed for this facility?		X	
20. Have previous permit, application, and fact sheet been examined?	X		

Part II. NPDES Draft Permit Checklist

Region III NPDES Permit Quality Review Checklist – For Non-Municipals (To be completed and included in the record for all non-POTWs)

II.A. Permit Cover Page/Administration	Yes	No	N/A
1. Does the fact sheet or permit describe the physical location of the facility, including latitude and longitude (not necessarily on permit cover page)?	X		
2. Does the permit contain specific authorization-to-discharge information (from where to where, by whom)?	X		
II.B. Effluent Limits – General Elements	Yes	No	N/A
1. Does the fact sheet describe the basis of final limits in the permit (e.g., that a comparison of technology and water quality-based limits was performed, and the most stringent limit selected)?	X		
2. Does the fact sheet discuss whether “antibacksliding” provisions were met for any limits that are less stringent than those in the previous NPDES permit?			X
II.C. Technology-Based Effluent Limits (Effluent Guidelines & BPJ)	Yes	No	N/A
1. Is the facility subject to a national effluent limitations guideline (ELG)?		X	
a. If yes, does the record adequately document the categorization process, including an evaluation of whether the facility is a new source or an existing source?			X
b. If no, does the record indicate that a technology-based analysis based on Best Professional Judgement (BPJ) was used for all pollutants of concern discharged at treatable concentrations?	X		
2. For all limits developed based on BPJ, does the record indicate that the limits are consistent with the criteria established at 40 CFR 125.3(d)?	X		
3. Does the fact sheet adequately document the calculations used to develop both ELG and /or BPJ technology-based effluent limits?	X		
4. For all limits that are based on production or flow, does the record indicate that the calculations are based on a “reasonable measure of ACTUAL production” for the facility (not design)?			X
5. Does the permit contain “tiered” limits that reflect projected increases in production or flow?		X	
a. If yes, does the permit require the facility to notify the permitting authority when alternate levels of production or flow are attained?			X
6. Are technology-based permit limits expressed in appropriate units of measure (e.g., concentration, mass, SU)?	X		
7. Are all technology-based limits expressed in terms of both maximum daily, weekly average, and/or monthly average limits?		X	
8. Are any final limits less stringent than required by applicable effluent limitations guidelines or BPJ?		X	
II.D. Water Quality-Based Effluent Limits	Yes	No	N/A
1. Does the permit include appropriate limitations consistent with 40 CFR 122.44(d) covering State narrative and numeric criteria for water quality?	X		
2. Does the record indicate that any WQBELs were derived from a completed and EPA approved TMDL?			X
3. Does the fact sheet provide effluent characteristics for each outfall?	X		
4. Does the fact sheet document that a “reasonable potential” evaluation was performed?	X		
a. If yes, does the fact sheet indicate that the “reasonable potential” evaluation was performed in accordance with the State’s approved procedures?	X		
b. Does the fact sheet describe the basis for allowing or disallowing in-stream dilution or a mixing zone?			X

II.D. Water Quality-Based Effluent Limits – cont.	Yes	No	N/A
c. Does the fact sheet present WLA calculation procedures for all pollutants that were found to have “reasonable potential”?			X
d. Does the fact sheet indicate that the “reasonable potential” and WLA calculations accounted for contributions from upstream sources (i.e., do calculations include ambient/background concentrations where data are available)?			X
e. Does the permit contain numeric effluent limits for all pollutants for which “reasonable potential” was determined?	X		
5. Are all final WQBELs in the permit consistent with the justification and/or documentation provided in the fact sheet?			X
6. For all final WQBELs, are BOTH long-term (e.g., average monthly) AND short-term (e.g., maximum daily, weekly average, instantaneous) effluent limits established?			X
7. Are WQBELs expressed in the permit using appropriate units of measure (e.g., mass, concentration)?			X
8. Does the fact sheet indicate that an “antidegradation” review was performed in accordance with the State’s approved antidegradation policy?	X		

II.E. Monitoring and Reporting Requirements	Yes	No	N/A
1. Does the permit require at least annual monitoring for all limited parameters?	X		
a. If no, does the fact sheet indicate that the facility applied for and was granted a monitoring waiver, AND, does the permit specifically incorporate this waiver?			
2. Does the permit identify the physical location where monitoring is to be performed for each outfall?	X		
3. Does the permit require testing for Whole Effluent Toxicity in accordance with the State’s standard practices?			X

II.F. Special Conditions	Yes	No	N/A
1. Does the permit require development and implementation of a Best Management Practices (BMP) plan or site-specific BMPs?		X	
a. If yes, does the permit adequately incorporate and require compliance with the BMPs?			X
2. If the permit contains compliance schedule(s), are they consistent with statutory and regulatory deadlines and requirements?			X
3. Are other special conditions (e.g., ambient sampling, mixing studies, TIE/TRE, BMPs, special studies) consistent with CWA and NPDES regulations?			X

II.G. Standard Conditions	Yes	No	N/A
1. Does the permit contain all 40 CFR 122.41 standard conditions or the State equivalent (or more stringent) conditions?	X		
List of Standard Conditions – 40 CFR 122.41			
Duty to comply	Property rights	Reporting Requirements	
Duty to reapply	Duty to provide information	Planned change	
Need to halt or reduce activity not a defense	Inspections and entry Monitoring and records	Anticipated noncompliance Transfers	
Duty to mitigate	Signatory requirement	Monitoring reports	
Proper O & M	Bypass	Compliance schedules	
Permit actions	Upset	24-Hour reporting Other non-compliance	
2. Does the permit contain the additional standard condition (or the State equivalent or more stringent conditions) for existing non-municipal dischargers regarding pollutant notification levels [40 CFR 122.42(a)]?	X		

Part III. Signature Page

Based on a review of the data and other information submitted by the permit applicant, and the draft permit and other administrative records generated by the Department/Division and/or made available to the Department/Division, the information provided on this checklist is accurate and complete, to the best of my knowledge.

Name	<u>Douglas Frasier</u>
Title	<u>Environmental Specialist II</u>
Signature	
Date	<u>4 February 2009</u>